VIRO CELEBERRIMO

THOMÆ PENNANT

ARMIGERO,

NATURÆ INDEFESSO INDAGATORI,

CUJUS

STUDIO ET ACUMINE

PHYSICIS

TUM EXTERIS

TUM PRÆCIPUE NOSTRATIBUS

PROVECTIOR, ORNATIOR, LOCUPLETIOR,

TRADITA EST SCIENTIA,

QUARTUM HUNC

NATURÆ VIVARII

FASCICULUM,

D. D. D.

GEORGIUS SHAW,

FREDERICUS P. NODDER.

vol
4

TO

THOMAS PENNANT

ESQUIRE,

FROM WHOSE LITERARY LABOURS

NATURAL HISTORY IN GENERAL,

AND THAT OF

GREAT BRITAIN IN PARTICULAR,

HAS RECEIVED SUCH AMPLE IMPROVEMENTS,

THIS FOURTH VOLUME

OF THE

NATURALIST's MISCELLANY

IS

WITH MUCH RESPECT INSCRIBED,

BY

HIS MOST OBEDIENT HUMBLE SERVANTS,

GEORGE SHAW,

FREDERICK P. NODDER.

QL
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1789
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CHMRB

PIPRA PUNCTATA.

Character Genericus.

Roſtrum capite brevius, baſi ſubtrigonum, integerrimum, apice incurvum.
Pedes greſſorii.

Lin. Syſt. Nat. p. 338.

Character Specificus.

PIPRA griſea, fuſco undulata, vertice aliſque nigris, albo punctatis, tectricibus caudæ rubris.

Femina? minus vivida, capite maculis flaveſcentibus.

Plura de hac avicula, quam plene deſcribit character ſpecificus, dicere ſupervacaneum habui, niſi quod ſpecies prius apud nos incognita, a Nova Hollandia nuperrime advenerit. De modo vivendi nihil eſt quod proferre poſſum; de hoc enim prorſus ſiletur.

THE

SPECKLED MANAKIN.

Generic Character.

Bill ſhorter than the head, ſomewhat triangular at the baſe, bent at the tip.

Feet greſſorial.

Specific Character.

GREYISH-BROWN MANAKIN, undulated with duſky, the top of the head and the wings black ſpeckled with white, the coverts of the tail red.

The ſuppoſed female is leſs vivid in colour, and the head is ſpotted with yellowiſh.

Of this bird, which is fully deſcribed by its ſpecific character, it is unneceſſary to ſay more than that it is a new ſpecies; having been lately received from New Holland, but unaccompanied by any particulars relative to its manner of life.

DSI

N°

London. Published Aug.st 1.st 1792 by F.P.D. Nodder & Co.° N.°5 Bower Street

MEDUSA INFUNDIBULUM.

Character Genericus.

Corpus gelatinoſum, orbiculatum (pleriſque) depreſſum.
Os ſubtus centrale.

Character Specificus, &c.

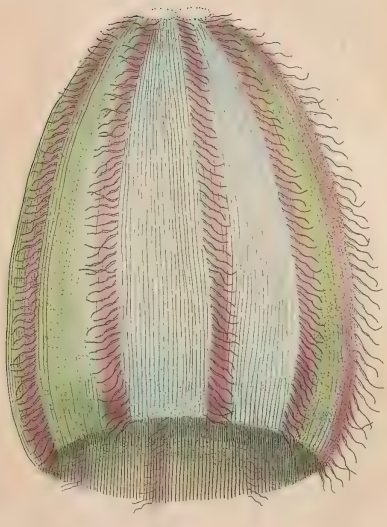
MEDUSA OVATA, coſtis ciliatis novem.
Gmel. Syſt. Nat. p. 3152.

VOLVOX BEROE.
Lin. Syſt. Nat. p. 1324.

In Inſulæ Jamaicæ hiſtoria formoſam hanc Meduſæ ſpeciem primus notaſſe videtur Dominus Browne; cujus deſcriptionem cum lectoribus lubentiſſime communicavi.

Forma eſt ovata, obtuſe actangula, cava, extremitate majore aperta, pellucida, ſubſtantia firma et gelata. Facillime ſe contrahit et dilatat; inter natandum ſemper expanſa. Radii longitudinales validiores ad verticem, unde quaſi a ſtella pulchra et oblonga aſſurgunt, ad marginem ſenſim attenuati. Singuli autem ſerie tentaculorum gracilium breviumque ornantur, quæ hinc inde

inde ad arbitrium animalis a ſummo ad imum celerrime moventur. Membrorum mollium et tenellorum quaſi undatim ſe invicem affequi properantium incitati curſus, variique et ſole repercuſſi colores nequeunt facile verbis exprimi. Circa inſulas Jamaicæ occiduas frequenter ſpectantur hæc animalia, raro tres pollices cum dimidio pollicis longitudine ſuperantia, duoſque vel duos cum dimidio in diametro.



THE

FUNNEL MEDUSA.

Generic Character.

Body gelatinous, orbicular, in moſt ſpecies depreſſed.

Mouth beneath, central.

Specific Character.

OVATE MEDUSA with (commonly) nine ciliated ribs.

The elegant ſpecies of Meduſa here repreſented, appears to have been firſt obſerved by Dr. Patrick Browne, who, in his Hiſtory of Jamaica, has deſcribed it in the following words:

" This beautiful creature is of an oval form, obtuſely octangular, hollow, open at the larger extremity, tranſparent, and of a firm gelatinous conſiſtence. It contracts and widens with great facility, but is always open and expanded when it ſwims or moves. The longitudinal radii are ſtrongeſt at the crown or ſmaller extremity, where they riſe from a very beautiful oblong ſtar, and diminiſh gradually from thence to the margin: but each of them is furniſhed with a ſingle ſeries of ſhort, delicate, ſlender appendixes or limbs, that move with

with great celerity either the one way or the other, as the creature pleaſes to direct its flexions, and in a regular accelerated ſucceſſion from the top to the margin. It is impoſſible to expreſs the livelineſs of the motions of theſe delicate organs, or the beautiful variety of colours that riſe from them while they play to and fro in the rays of the ſun; nor is it eaſy to expreſs the ſpeed and regularity with which the motions ſucceed each other from one end of the rays to the other."

Theſe animals are frequently ſeen about the weſtern iſlands of Jamaica: they ſeldom exceed three inches and a half in length, or two and a half in the largeſt tranſverſe diameter.

PAPILIO NESTOR.

Character Genericus.

Antennæ apicem verſus craſſiores, ſæpius clavato-capitatæ.

Alæ (ſedentis) erectæ ſurſumque conniventes. (*Volatu* diurno.)

Lin. Syſt. Nat. p. 744.

Character Specificus, &c.

PAPILIO alis dentatis ſupra fuſcis albo maculatis diſcoque cæruleo, ſubtus ocellis tribus quatuorque.

Fabr. Spec. Inſ. 2. p. 24.

PAPILIO alis dentatis: ſupra fuſcis maculis diſcoque cæruleis, ſubtus ocellis tribus biniſque.

Lin. Syſt. Nat. p. 752.
Eq. Achiv.

Papilionem Achillem in hoc opere jam deſcriptum magnitudine fere æquat, forma eleganti ſuperat Papilio Neſtor. Alarum oræ profunde denticulatæ ſunt, mediaque pars, ſeu diſcus es lucidiſſime cæruleus; limbi autem

autem ſunt nigri, maculis lunatis albis et cæruleſcentibus, ut et figura demonſtrat, notati. Americam Auſtralem incolit papilio Neſtor. Inferior ſuperficies eſt fuſca, maculas habens ocellatas, marginibus centriſque albidis.

London, Published Aug.st 1.1790. by F. P. Nodder & Co. N.o 18 Brewer Street.

NESTOR.

Generic Character.

Antennæ or *Horns* thickening towards the upper part, and generally terminating in a knob, or club-ſhaped tip.

Wings (when ſitting) erect, and meeting upwards. (*Flight* diurnal.)

Specific Character, &c.

BUTTERFLY with indented blackiſh wings with bright-blue diſk and white ſpots; the under ſurface brown, with larger and ſmaller ocellated ſpots.

Mer. Sur. t. 9.
Cram. 2. t. 19. f. A. B.

The Papilio Neſtor is nearly equal in ſize to the P: Achilles, which has already been figured in the preſent work; but is more elegant in ſhape, the wings being deeply indented or ſcolloped round the edges. The chief or middle part of all the wings is of the richeſt brilliant blue: the edges are black marked with lunated

lunated ſpots of white and blueiſh, as repreſented in the figure. It is a native of South America. The lower ſurface is brown, with ſome ocellated ſpots with whitiſh margins and centres.

MOTACILLA HIRUNDINACEA.

Character Genericus.

Roſtrum ſubulatum, rectum: mandibulis ſubæqualibus.
Nares obovatæ
Lingua lacero-emarginata.

Lin. Syſt. Nat. p. 328.

Character Specificus.

MOTACILLA? chalybeo-nigra, gula pectore criſſoque phoeniceis, abdomine niveo faſcia longitudinali nigra.

Speciem hanc, Novæ Hollandiæ incolam, in Angliam non ita pridem illatam, ignoraſſe videntur ornithologi. Vultu eſt paululum ambiguo, et dubitari forſan poſſit an hirundini potius quam motacillæ ſit ſimilior. Cum vero prorſus ſit impoſſibile avis penitus novæ (præſertim ſi ipſum ſpecimen vel tantillum læſum ſit) verum et certum locum in ſyſtemate deſignare; nomen igitur triviale dedi, quod admoneat ulterius quærendum eſſe, ſi detur aliquando occaſio accuratius examinandi.

London, Published Sept.r 1st 1792, by J.P. Nodder & Co.N.13 Brewer Street

THE

SWALLOW WARBLER.

Generic Character.

Bill ſubulated (or owl-ſhaped;) ſtrait; the mandibles nearly equal.
Noſtrils nearly oval.
Tongue jagged, or lacerated towards the tip.

Specific Character.

BLACK WARBLER? with a gloſs of ſteel-blue, throat breaſt and vent crimſon, abdomen white with a longitudinal band of black.

This is a ſpecies hitherto unknown to ornithologiſts: it is an inhabitant of New Holland, and was very lately brought into this kingdom. Its general appearance ſeems to be ſomewhat doubtful, and it may be thought perhaps to make as near an approach to the genus Hirundo as to that of Motacilla. As it is impoſſible, however, in new ſpecies, eſpecially when the ſpecimens have received the ſmalleſt injury, to aſcertain with perfect preciſion their true place in ſyſtem, I have therefore

therefore applied to this bird a trivial name which may ſerve as a hint for farther inquiry, ſhould opportunity offer, of examining the ſpecies in a more accurate manner.

GRYLLUS LAURIFOLIUS.

Character Genericus.

Caput inflexum, maxillosum, palpis instructum.
Antennæ setaceæ, seu filiformes.
Alæ quatuor, deflexæ, convolutæ: inferiores plicatæ.
Pedes postici saltatorii. *Ungues* ubique bini.
Lin. Syst. Nat. p. 693.

Character Specificus, &c.

GRYLLUS thorace subtetragono lævi trilobo, alis lanceolatis elytro obtusiore longioribus.
Lin. Syst. Nat. p. 695.

LOCUSTA thorace tetragono lævi, alis lanceolatis elytro longioribus.
Fab. spec. inf. 1. p. 356.

LOCUSTA maxima viridis, alis latissimis.
Sloan. jam. 2. p. 201. t. 236. f. 1.

Nomen inde adeptum est hoc insectum quod alarum thecæ seu elytra Lauri foliis simillima sint. In generibus Grylli et Mantis multis speciebus facies est quasi foliata;

foliata; quod voluiſſe quodammodo videtur Natura, ut in arborum coma verſantes ab avium aliorumque hoſtium rapacitate fiant ſecuriores. Reperitur hæc grylli ſpecies in America.

London Published 1st December 1792 by T. P. Nodder & Co. No 12 Bruwer Street.

THE

BAY-LEAVED LOCUST.

Generic Character.

Head inflected, armed with jaws, and furniſhed with palpi or feelers.

Antennæ either ſetaceous or filiform.

Wings four, deflected, convolute; the inferior ones plaited.

Hind-feet formed for leaping. Claws on all the feet double.

Specific Character, &c.

LOCUST with ſmooth and ſomewhat tetragonal thorax, and wings (commonly) rather longer than the wing-ſheaths.

THE BAY-LEAVED LOCUST.

This inſect has obtained its name from the ſtrong general reſemblance which the upper or outer wings bear to the leaves of the Bay tree. Several ſpecies in the genera of Gryllus and Mantis are highly remarkable for this leaf-like appearance, which ſeems intended in ſome meaſure as a ſecurity to the animals from

from the attacks of birds and other creatures while ſeated amongſt the foliage of the trees which they frequent. This ſpecies is a native of many parts of America.

TRIGLA CATAPHRACTA.

Character Genericus.

Caput loricatum lineis ſcabris.
Membr: branch: radiis ſeptem.
Digiti liberi ante pinnas pectorales.

Character Specificus, &c.

TRIGLA digitis geminis, roſtro furcato elongato, corpore octagono.
Lin. Syſt. Nat. p. 496.

TRIGLA cirris plurimis, corpore octagono.
Art. gen. 46. *ſyn.* 75.

Piſcium loricatorum ſeu *cataphractorum*, ut dicuntur, vix elegantior eſt ſpecies quam quæ in tabula depingitur. Unica eſt e Triglis quæ hoc tegmine defenditur, cum reliquis omnibus hactenus cognitis ſquamæ parvulæ obductæ ſint. Caput mire conformatum: roſtrum enim late bifurcum, apicibus obtuſis; quod vel ſolum hunc piſcem ſatis diſtinguat a Cotto cataphracto aliiſque nonnullis, cum quibus fortaſſe eum ſpectator

incurioſus, notiſque quæ genus diſcriminant parum verſatus, poſſet confundere. Color albido-fuſco-pallet. Longa eſt, ut plurimum, Trigla cataphracta circiter ſex uncias. In mari naſcitur Mediterraneo.

London Published April 1st 1834 by S. Maunder & C.H.S. 13 Bennet Street.

THE

MAILED GURNARD.

Generic Character.

Head covered with long plates.
Branchioſtegous membrane with ſeven rays.
Appendages ſituated before the pectoral fins.

Specific Character, &c.

GURNARD with two pectoral appendages, elongated forked ſnout, and mailed body.

THE MAILED GURNARD.

Amongſt the mailed or cataphracted fiſh, the ſpecies here repreſented is one of the moſt elegant. It is the only ſpecies of Trigla which is diſtinguiſhed by this peculiar kind of coating; all the others yet known being covered with ſmall ſcales. The form of the head is ſingular; the ſnout or upper jaw being widely bifurcated, with the diviſions or proceſſes obtuſe. This forked appearance of the head is alone ſufficient to diſtinguiſh this fiſh from the Cottus cataphractus and ſome others, with which an incurious ſpectator, not attending

ing to its generic characters, might perhaps be in danger of confounding it. Its colour is a very pale whitiſh brown, and its uſual length about ſix inches. It is a native of the Mediterranean ſea.

CRAX ALECTOR.

Character Genericus.

Roſtrum baſi cera obductum in utraque mandibula.
Pennæ caput tegentes revolutæ.

Lin. Syſt. Nat. p. 269.

Character Specificus, &c.

CRAX cera flava, corpore nigro, ventre albo.

Lin. Syſt. Nat. p. 269.

GALLUS INDICUS.

Sloan. Jam. 2. p. 302. t. 260.

MITUPORANGA.

Raii. Syn. p. 52. 6.

Crax Alector e maximis eſt gallinacei generis. In America Auſtrali abundat, caroque ejus in deliciis habetur. Fit cicur nullo fere negotio. Coloribus nonnunquam variat. Femina fuſco-ferruginea eſt.

London Published Oct.r 1st 1794 by T.P. Nodder & Co. N.os Bremer Street.

THE

COMMON CURASSOW.

Generic Character.

Bill on both mandibles covered with a cere.
Feathers on the head revolute.

Specific Character, &c.

BLACK CURASSOW with yellow cere; the lower part of the abdomen white.

LE HOCCO DE LA GUIANE.

Briſſ. orn. 1. p. 298. pl. 29.

MITUPORANGA.

Will. orn. p. 161. pl. 28.

The Crax Alector or black Curaſſow is one of the largeſt of the gallinaceous tribe. It is common in South America, where it is much eſteemed as an article of food. It is eaſily domeſticated, and is ſometimes ſubject to vary in colour. The female is of a ferruginous brown.

MADREPORA CEREBRUM.

Character Genericus.

Animal Meduſa.
Corallium cavitatibus lamelloſo-ſtellatis.
Lin. Syſt. Nat. p. 1272.

Character Specificus, &c.

MADREPORA ſubgloboſa, anfractibus longiſſimis tortuoſis, prominentiis plano-obtuſis.

MADREPORA compoſita, labyrinthiformis hemiſphærica, lamellis duplicato ordine integris obtuſis, ſinubus æqualibus.
Hort. Cliff. 489.

MADREPORA MEANDRITES.
Pall. el. zooph. p. 292. n. 171.

CORALLIUM CEREBRI FACIE.
Petiv. gaz. t. 68. n. 11.

Varia eſt hujus Madreporæ magnitudo. Interdum paucas tantum uncias, interdum duos pedes diametro ſuperat. Forma illi eſt fere ſphærica, perfectior tamen in certis ſpeciminibus. Ob ſimilitudinem quam habet ſuperficies

ſuperficies parti externæ corticatæ ſeu cinericiæ (ut vocatur) in quadrupedum cerebro, nomen illi inde commune *Lapis cerebri* inditum eſt. Alia eſt ſpecies, huic de qua jam loquimur ſimillima, quamque primo viſu eandem putares; et ſane dubitari poſſit ſitne hujus varietas; differt enim tantum in gyris prominentibus, qui compreſſiores et acutiores, non complanati. Notandum eſt Madreporis rotundatis non raro ineſſe duo vel tria foramina, diametri non exiguæ, ad cylindros in ipſo corallio terebratos ducentia. Non videntur hujuſmodi foramina naturæ opus eſſe, ſed aliorum animalium, Terebellarum nempe (ut vocantur) quæ corallium perforant, interdumque in imis hiſce tubis quaſi in cubile jacentes reperiuntur.

London Published Oct.r 1.st 1792 by F.P.s Nodder & Co.s No.s 28 Bevaux Street.

THE

BRAIN MADREPORE.

Generic Character.

Animal reſembling a Meduſa.
Coral marked with lamellar ſtriated cavities.

Specific Character, &c.

NEARLY GLOBULAR MADREPORE, with very long tortuous undulations, the prominent ones terminating flattiſh.

THE GREAT BRAIN-STONE.

The Madrepore repreſented on this plate is found of various ſizes, from a few inches to upwards of two feet in diameter. Its form is nearly globular, but much more accurately ſo in ſome ſpecimens than in others. From the general reſemblance which the undulated ſurface bears to the cortical or exterior part of the brain in quadrupeds, it has obtained its common title of Brain-ſtone. There is another ſpecies which in ſize and general appearance ſo very nearly reſembles the preſent, that on a curſory view it would readily paſs for the ſame; and indeed can ſcarce be regarded in any other

other light than that of a variety. The difference conſiſts in the prominent undulations, which in that ſpecies are of a more compreſſed form, ſo as to riſe with a ſharp edge; not flattened as in the preſent ſpecies. I ſhould obſerve that in the globular Madrepores are often, and indeed generally, ſeen one or two or more round orifices of conſiderable diameter, and which lead to cylindrical perforations in the body of the coral. Theſe holes do not ſeem ſo much owing to the natural ſtructure of the Madrepore itſelf, as to the operation of other animals, ſuch as Terebellæ, which are ſometimes found imbedded in theſe tubes.

MANTIS SICCIFOLIA.

Character Genericus.

Caput nutans maxillosum, palpis instructum.
Antennæ (plerisque) setaceæ.
Alæ quatuor, membranaceæ, (plerisque) convolutæ; inferiores plicatæ.
Pedes antici compressi, subtus serrato-denticulati, armati ungue solitario et digito setaceo laterali articulato. *Postici* quatuor læves, gressorii.
Thorax linearis, elongatus, angustatus.

Lin. Syst. Nat. p. 689.

Character Specificus, &c.

MANTIS thorace denticulato, femoribus ovatis membranaceis.

Lin. Syst. Nat. p. 689.
Roes. ins. 2. t. 17. fig. 45.
Edw. av. t. 258.

Omnibus Mantin hanc obiter intuentibus, præcipue si alarum thecæ seu elytra claudantur, in mentem venit folii mortui exsiccatique similitudo. Verisimile est vivæ viresccre potius colores quam subfuscari: quæ tamen in Europam illata sunt specimina respondent tabulæ. Cum

ei alarum inferiorum rudimenta tantum ſint, non impoſſibile eſt quin revera ſit larva ſpeciei cujuſdam hactenus non plene cognitæ et deſcriptæ; ni potius e numero ſit illorum inſectorum quæ conſtanti naturæ conſilio alis carent, quorum multa ſunt non ſolum in claſſe *Hemiptera* ſed et *Coleoptera*; in certis ſcilicet *Cimicis*, *Carabi*, aliorumque ſpeciebus.

THE

DRY LEAF MANTIS.

Generic Character.

Head unſteady; Mouth armed with jaws, and furniſhed with palpi.

Antennæ ſetaceous, (ſome few ſpecies excepted.)

Wings four, membranaceous, in moſt ſpecies convoluted: the lower ones (generally) plicated.

Feet anterior compreſſed, ſerrated beneath, armed with a lateral ſolitary claw and jointed proceſs; *poſterior* four ſmooth, formed for walking.

Thorax (in moſt ſpecies) elongated and narrowed.

Specific Character, &c.

MANTIS with denticulated thorax and ovate membranaceous thighs.

THE WALKING LEAF.

Edw. pl. 258.

The very remarkable ſhape and colour of this inſect uniformly ſuggeſt the idea of a dried or withered leaf, which the animal, when its wings are cloſed, ſo much

much reſembles, that, on a curſory view, it might eaſily be miſtaken for ſuch. It is not improbable that in a recent ſtate the colour may be rather green than browniſh: the ſpecimens however which are brought into Europe are generally of the tinge repreſented in the plate. It is remarkable that this curious animal has merely the rudiments of under or lower wings. It is therefore not improbable that it may in reality be the larva of ſome ſpecies not yet fully deſcribed; or elſe that it is a ſpecies which is naturally apterous; a circumſtance of which ſeveral inſtances occur, not only in the claſs *Hemiptera*, but alſo in that of *Coleoptera*; as is ſufficiently proved in ſome ſpecies of *Cimex*, *Carabus*, and others.

TANTALUS RUBER.

Character Genericus.

Roſtrum longum, ſubulatum, teretiuſculum, ſubarcuatum.

Facies ultra oculos nuda.

Lingua brevis, lata.

Saccus jugularis nudus.

Nares ovatæ.

Pedes tetradactyli, baſi palmati.

Lin. Syſt. Nat. p. 240.

Character Specificus, &c.

TANTALUS facie roſtro pedibuſque rubris, corpore ſanguineo, alarum apicibus nigris.

Lin. Syſt. Nat. p. 241.

NUMENIUS braſilienſis coccineus.

Briſſ. av. 5. p. 344. t. 29. f. 1. 2.

NUMENIUS RUBER.

Cateſb. Car. 1. p. 84. t. 84.

NUMENIUS INDICUS.

Clus. exot. 366.

Avium nitidiſſimarum parens orbis occiduus paucas alit hac ſplendidiores, cui totus veſtitus, exceptis remigum longiorum apicibus, lætiſſime eſt coccineus. Roſ-

trum pedeſque pallentes rubent. Varias licet Americæ partes incolat, in auſtralioribus tamen frequentior eſt. Magnitudine Numenio communi fere æqualis eſt, eodemque propemodum utitur vivendi modo.

London Published Nov.r 1st 1792, by F.P. Nodder &c.o N.o 15 Brewer Street.

THE

SCARLET IBIS.

Generic Character.

Bill long, thick at the baſe, incurvated.
Face, and ſometimes the whole head, naked.
Noſtrils linear.
Tongue ſhort.
Toes connected at the baſe by a membrane.

Lath. Syn. 3. p. 104.

Specific Character, &c.

SCARLET IBIS with red beak and legs; the wings tipped with black.

SCARLET IBIS.

Lath. Synopſ. 3. p. 106.

RED CURLEW.

Cateſb. Car. 1. p. 84. pl. 84.

Amongſt the brilliant birds of the weſtern Continent few are more conſpicuous than the preſent; the whole plumage of which, except the tips of the wings, is of the brighteſt and moſt vivid ſcarlet. The bill and legs are of a pale red. It is found in many parts of America, but is moſt common in the ſouthern provinces. Its ſize is nearly that of a Curlew, which it alſo reſembles in its manner of life.

GORDIUS AQUATICUS.

Character Genericus.

Corpus filiforme, æquale, læve.

Lin. Syſt. Nat. p. 1075.

Character Specificus, &c.

GORDIUS pallidus extremitatibus nigris.

Lin. Syſt. Nat. p. 1075.

SETA, s. vitulus aquaticus.

Aldr. inſ. 720. t. 765.

GORDIUS SETA.

Müll. hiſt. verm. 1. 2. p. 30. n. 161.

SETA PALUSTRIS.

Planc. conch. app. c. 22. t. 5. f. F.

Vermis iſte, ſetæ ſimillimus, qui Gordius vocatur, in aquis mollibus et ſtagnantibus præcipue cernitur, idque fere omni tempore, frequentius autem æſtivo. Longus, ut plurimum, vix quatuor uncias, pertingit interdum ad quinque vel etiam ſex. Color communis fuſco-pallet, extremitatibus nigricantibus, vel ſaltem magis infuſcatis reliquo corpore. Nomen Gordii, quod et generi commune, inde adeptus eſt, quia contorquere ſe et colligere ſoleat

ſoleat quaſi in nodum qui *Gordius* nuncupatur. Cum diu manſerit convolutus, iterum in priſtinam longitudinem gradatim ſe explicat. Interdum in aquis movetur more hirudinis, ſatis celeriter; alias cunctanter, greſſuque quo nihil concipi poteſt languidius. Nomen vulgare *Hair-worm*, non ob formam ſolummodo datum eſt; ſed quod eum revera ortum eſſe a ſeta quæ ab equo ſeu alio animali in aquas deciderat, olim crediderit indoctum vulgus, etiamnum erroris tenax. Si Gordius digitum morſu læſerit, paronychiam non raro excitare dicitur: idque in Suecia ſubinde accidere a Linnæo memoratur fide non modo ruſticorum, ſed experimento viri eruditi, naturæ et veritatis ſtudioſiſſimi. Poſſum quoque egomet teſtimonium proferre hominis fide digniſſimi, qui mihi retulit, Gordium, quem incaute nuda manu ex aquis eripuit, extremum ſibi digitum vulneraſſe, indeque exortam eſſe paronychiam. An inſit morſui peculiaris quædam irritatio, an ab alia qualibet punctura idem proveniret effectus, vix auſim dicere. Piaculum foret, ſi de Gordio locutus morbum nomine *Venæ Medinenſis* cognitum filerem, qui oritur a Gordii ſpecie quæ in calidioribus mundi regionibus (cum adhuc forte parvula ſit) ſub cutim irrepere dicitur, ibique in magnam creſcere longitudinem, et difficillime extrahi, dolorem ſummum moleſtiamque excitans. Nec prætereundum eſt, gordii ſpeciem, (ipſum fortaſſe vulgarem dum adhuc junior) in animalibus variis præter omnem expectationem inveniri; in ſcarabæis ſcilicet, erucis, aliiſque inſectis. Immo memini meipſum in cerebro Lacertæ aquaticæ Linnæi Gordios adeo exiguos obſervaſſe, ut cum microſcopio acurate eos examinaſſem, unciæ milleſimam partem vix ſuperare viderentur.

Vitæ

Vitæ tenaciſſimus eſt Gordius vulgaris, et quamvis in aqua ſervatus quaſi mortuus multas horas jaceat, poſtea tamen integrari videntur priſtinæ vires. Notandum eſt reperiri eum non modo in aqua ſed interdum in ipſa terra; in hortis præcipue poſt pluviam, et in humo argillacea, in qua facillime et liberrime ſe movere ſolet.

THE

COMMON GORDIUS,

OR

HAIR-WORM.

Generic Character.

Body filiform, equal, ſmooth.

Specific Character, &c.

PALE-BROWN GORDIUS with dark extremities.

THE COMMON HAIR-WORM.

The Gordius aquaticus or common Hair-Worm is principally an inhabitant of ſoft ſtagnant waters, and may be found during the greateſt part of the year, but is moſt plentiful in the ſummer months. It grows to the length of five or ſix inches, but is not very often ſeen of more than about four inches. Its moſt general colour is a paliſh brown, with the extremities blackiſh, or at leaſt darker than the other parts. It has obtained the generic name of Gordius, from its having a habit of ſometimes twiſting itſelf into ſuch peculiar contorſions as to reſemble a complicated or Gordian knot. In this ſtate it often continues for a conſiderable ſpace; and

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and then ſlowly diſengages itſelf, and extends its body at full length. Sometimes it moves in the water with a pretty quick undulating motion like that of a leech; and at other times in the ſloweſt and moſt languid manner imaginable. Its popular name f Hair-Worm was not given it from its form alone, but from an idea that it was produced from the hair of horſes and other animals which had been caſt in the water: an opinion which is not even yet extinct amongſt the vulgar. A remarkable circumſtance relative to this animal is, that its bite, which it ſometimes inflicts on being taken out of the water, has been known to produce the complaint called a whitlow. This is mentioned by Linnæus as a popular idea in Sweden, and which had been confirmed by the experience of a perſon of high reputation. I can alſo add the teſtimony of a gentleman of great veracity, who aſſured me that on having incautiouſly taken a Gordius out of the water, he was bit by it on the tip of his finger, and that in conſequence of the bite a whitlow ſoon took place. Whether however there be really any thing peculiarly irritating in the bite of this worm, or whether a ſimilar puncture cauſed by any other means might not produce the ſame effect, I cannot take upon me to determine.

It would be unpardonable on this ſubject to omit obſerving that the complaint called the Guinea-Worm, or Vena Medinenſis, which ſometimes happens in the warmer regions, is owing to a ſpecies of Gordius, which is ſaid to inſinuate itſelf (probably when very ſmall) under the ſkin; where it grows to a great length; is productive of very troubleſome ſymptoms, and is extremely difficult to extract. It is remarkable alſo that a ſpecies

of

of Gordius, perhaps the Gordius aquaticus in a very young ſtate, occurs not unfrequently in animals in which one would leaſt expect to find it; viz. in beetles of different ſorts, in caterpillars, and other inſects; and I once diſcovered in the brain of the ſmaller Water-Newt (Lacerta aquatica. Lin.) a number of microſcopic Gordii ſo extremely minute as not to exceed the thouſandth part of an inch in length. The gordius aquaticus is very tenacious of life, and after being kept a long time in a veſſel of water, will ſometimes appear perfectly motionleſs, and as if dead, for ſeveral hours; after which it will again aſſume its former vigour, and ſeem as healthy as at firſt. It ſhould alſo be obſerved that the Gordius is not unfrequently found in earth as well as in water; eſpecially in garden-ground after rain; and in clayey ſoils, in which it moves with great facility.

COLUBER CERASTES.

Character Genericus.

Scuta abdominalia.
Squamæ ſubcaudales.

Lin. Syſt. Nat. p. 275.

Character Specificus, &c.

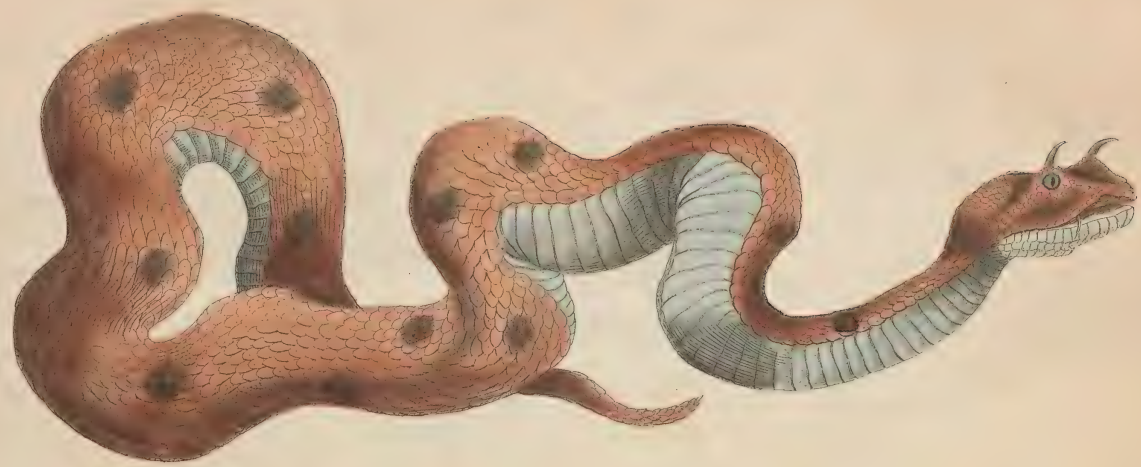
COLUBER cornutus fuſco-ferrugineus, ſcutis abdominalibus 150, ſquamis ſubcaudalibus 25.

Bellon. it. 203.
Ellis. act. angl. 56. t. 14.

Coluber Ceraſtes, longus ut plurimum, pedem ſeu quindecim uncias, cornubus duobus incurvis ſupra oculos ſitis et antrorſum ſpectantibus inſignis eſt: quæ licet nequaquam ſimilia ſint quadrupedum cornubus, nec vulnus poſſint vel inferre vel defendere, augent tamen quodammodo odium quod contra totum genus ſerpentinum plerique ſolemus concipere, ipſiuſque animalis vultum maligniorem et truculentiorem reddunt. In Africa innaſcitur Ceraſtes, præcipuamque ſibi ſedem delegit in deſertis ſiccis et arenoſis. In Ægypto? communis eſt, nec non in certis Nubiæ et Abyſſiniæ partibus. In Syria quoque et Arabia plurimus. Ad viperæ vulgaris

vulgaris ſimilitudinem non parum accedit Ceraſtes; ob morſum tamen magis eſt pertimeſcendus, quippe non ſolum eos qui incaute illum proculcant vulnerat, verum etiam magno et repentino impetu in prætereuntes e longinquo inſilit. In multis Africæ regionibus, ſi qua fides peregrinatoribus digniſſimis, ſunt qui hos nec non alios venenatos ſerpentes medicamentis pollentibus hebetatos poſſunt faſcinare; quique rite parati nihil ab illis metuunt, omnigena licet provocatione irritentur. Lubenter crederem ſerpentes ita delenitos, telis venenatis, dentibus ſcilicet tubulatis prius fuiſſe privatos, ni Brucio, cui in itineribus Africanis plurimæ oblatæ ſunt occaſiones veritatem eruendi, longe alia mens eſſet. "Audacter poſſum affirmare me in urbe Cairo vidiſſe "(quod ſane alicui in quotidianum datur conſpectum,) "errantem quendam ab avium conditarum coemeteriis, "qui nudis manibus Ceraſtem e plurimis in imo dolio "jacentibus ſublatum capiti impoſuit, pileoque com- "muni rubro cooperuit; poſtea in pectore fovit, et "quaſi monile circa collum ligavit. Simul ac vero "gallinæ admoveretur ipſiſſimus hic ſerpens, momordit "eam, illaque cito periit. Tandem homo, ut faſtigi- "um operi imponeret, ſerpentem collo prehenſum, a "cauda incipiens ſtatim abſque ullo faſtidii ſigno, ac "ſi quis daucum aut *celeri* devoravit."

Addit Brucius omnes populos nigros in regno *Sennaar* perfecte hoc modo contra Ceraſtes armari, eoſque non ſolum in pectoribus imponere, ſed cum iis ludere, et in ſeſe timoris et periculi expertes invicem conjicere, uti pueri poma.



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THE CERASTES, OR HORNED VIPER.

Generic Character.

Tranſverſe *Lamellæ* under the abdomen,
Alternate *Scales* under the tail.

Specific Character, &c.

FERRUGINOUS-BROWN HORNED VIPER with about 150 abdominal plates and 25 ſubcaudal ſcales.

THE CERASTES, OR HORNED SNAKE.

The Coluber Ceraſtes, which commonly grows to the length of about a foot or fifteen inches, is diſtinguiſhed by a pair of horns or curved proceſſes, ſeated above the eyes and pointing forwards. Theſe horns have nothing analogous in their ſtructure to the horns of quadrupeds, and are by no means to be conſidered in the light of either offenſive or defenſive weapons: they increaſe however the natural antipathy ſo generally felt againſt the ſerpent tribe, and give the animal a more than

than ordinary appearance of malignity. This ſerpent is a native of Africa, and is principally found in ſandy deſerts and dry places. In Egypt? it is common, as well as in ſome particular parts of Nubia and Abyſſinia. It alſo abounds in Syria and Arabia. It bears a very great analogy to the common viper: its bite is perhaps ſtill more to be dreaded, ſince excluſive of the general danger in treading accidentally on one of theſe reptiles, and thus irritating it unawares, it poſſeſſes a propenſity of ſpringing with great ſuddenneſs to a conſiderable diſtance, and aſſailing without provocation thoſe who happen to approach it. In many parts of Africa, according to the teſtimony of the moſt reſpectable travellers, there prevails a method of charming, as it were, or ſtupifying theſe, as well as other poiſonous ſerpents, by the uſe of certain preparations of ſuch powerful efficacy as effectually to ſecure the perſon ſo prepared from being in the leaſt bitten by the animals, though oppreſſed by every ſpecies of irritation. A ſuſpicion might naturally ariſe that the ſerpents thus treated had been firſt deprived of their fangs, and conſequently of their power of poiſoning; but that this is not the caſe, is expreſſly declared by Mr. Bruce, who, during his African travels, had ample opportunities of witneſſing theſe extraordinary experiments. On this ſubject Mr. Bruce expreſſes himſelf as follows:

" I will not heſitate to aver, that I have ſeen at Cairo
" (and this may be ſeen daily, without trouble or ex-
" pence) a man who came from above the catacombs
" where the mummy-birds are kept, who has taken a
" Ceraſtes with his naked hand from a number of
" others lying at the bottom of the tub; has put it

" upon

" upon his bare head, covered it with the common red " cap he wears, then taken it out, put it in his breaſt, " and tied it about his neck like a necklace; after " which it has been applied to a hen, and bit it, which " has died in a few minutes: and to complete the ex- " periment, the man has taken it by the neck, and " beginning at his tail, has ate it, as one would do a " carrot, or a ſtock of celery, without any ſeeming " repugnance."

Mr. Bruce adds, that all the black people in the kingdom of Sennaar are perfectly armed in this manner againſt the bite of the Ceraſtes, and put them at any time into their boſoms, and throw them at one another as children do apples, with the moſt perfect impunity.

DIDUS INEPTUS.

Character Genericus.

Roſtrum medio coarctatum rugis duabus tranſverſis: utraque mandibula inflexo apice.
Facies ultra oculos nuda.

Lin. Syſt. Nat. p. 267.

Character Specificus, &c.

DIDUS nigricans albido-nebuloſus, pedibus tetradactylis.

DIDUS INEPTUS.

Lin. Syſt. Nat. p. 267.

GALLUS gallinaceus peregrinus.

Clus. exot. 99. t. 100.

CYGNUS CUCULLATUS.

Nieremb. nat. 231.

STRUTHIO CUCULLATUS.

Lin. Syſt. Nat. X. p. 155.

Si unico vero et genuino exemplari, quod ab ipſa vita delineari dicitur, undeque reliqua fere omnia adumbrata ſunt, danda ſit fides; hebetat vultum hujus avis tam plumbea ſtupiditas, ut nomen inde triviale adepta

fit. Mole saltem æqualis esse dicitur cygno; cujus ab eleganti forma in reliquis longe abhorret. Color generalis niger est; alarum autem pars media, abdomen, et in cauda plumæ aliquot fere albent. Rostri enormis maxilla superior prope apicem macula magna rubente distinguitur, basi seu lata parte longe super frontem retro excurrente, ut facies quasi cucullata videatur. Mirum est, cum scientiæ naturalis studio quotidianum fere nunc dierum fiat incrementum, deesse vel unicum specimen singularis istius avis, quæ, quantum ipse comperi, rarissime in Europam illata est ab anno 1598, quo tempore a parvula Mauritii insula Indica advenisse dicitur. Descripserunt eam plurimi auctores, Nierembergius scilicet, Bontius, Clusiusque inter vetustiores, et e recentioribus Buffonus, Edwardus, Brissonus, alique. Pene tamen ignoscemus dubitantibus an revera extiterit, ni aliter testarentur Herbertus aliique qui se ipsam in natalibus regionibus suis oculis conspexisse profitentur; ipseque Willoughbeius suum calculum adderet, qui asserit se spolia ejus in museo Joannis Tradescantii vidisse. In Museo Britannico asservatur, quod plurimi auctores imitati sunt, ipsum unde avis depicta est archetypum. Frumento vesci dicitur Didus, et ingenio esse mansueto. Sitne ad edendum utilis varie disputatur. Alii durum et injucundum ducunt; alii contra dignum putant ut mensæ apponatur; pectus præcipue, quod, teste Bontio, tantum est, ut horum tria quatuorve centum convivis sufficiant. Africæ et Indiæ Orientalis insulas inhabitat.

Denique, liceat fortasse nobis conjicere annon *Diomedeæ exulantis* Linnæi nondum ætate provectæ infidæ delineationi Didus originem debeat. Quod si concedatur, certe

certe manus pictoris nimium nimiumque oblita eſt veritatis, quæ pedes Diomedeæ pinnatos alaſque ampliſſimas et longiſſimas neglexerit, ut taceam cætera, in quibus hæ aves nullo modo convenire queant. E contrario tamen negari non poſſit roſtrum Diomedeæ roſtro quod Didi putatur non multum eſſe diſſimile; et ſi ſpecimen Diomedeæ junioris examinemus cui color adhuc imperfectus, cujuſque ſuper alas cæteraſque partes albedo cum nigredine commiſcetur, præſertim ſi avem torpidam et ſubſidentem fingimus, quod interdum fit, non omnino impoſſibile fatebimur quin a falſa aliqua hujuſmodi repræſentatione Didus originem duxerit. Charltonus in libro cui titulus *Onomaſticon Zoicon*, aſſerit roſtrum cum capite Didi tunc temporis in Muſeo Regalis Societatis Londinenſis fuiſſe ſervatum. Quod tamen ille roſtrum Didi cenſuit nihil aliud fortaſſe fuerit quam Diomedeæ roſtrum. Res igitur non prorſus caret dubio, et optandum admodum eſt ut avis ipſa vera et genuina, ſi modo talis alicubi exſtet, laudabili phyſicorum hodiernorum diligentia in Europam tandem aſportetur.

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THE

DODO.

Generic Character.

Bill large, bending inward in the middle of the upper mandible, marked with two oblique ribs, and much hooked at the end.

Noſtrils placed obliquely near the edge, in the middle of the bill.

Legs ſhort, thick, feathered a little below the knees.

Toes three forward, one backward.

Pennant.

Specific Character, &c.

BLACKISH DODO, clouded with whitiſh; with tetradactylous feet.

THE DODO.

Will. orn. p. 153. pl. 27.
Edw. pl. 294.

DOD-EERSEN, or VALGH-VOGEL.

Herbert. trav. p. 382. pl. in p. 383.

This bird, if we may depend on the fidelity of the only original figure, (which is ſaid to have been taken from the life, and from which almoſt all authors have hitherto

hitherto copied,) is diſtinguiſhed by an aſpect of ſuch confirmed ſtupidity, as to have obtained the trivial name of *ineptus*. In ſize it is ſaid at leaſt to equal, if not exceed, a ſwan, but in ſhape and general appearance forms a ſtriking contraſt to that elegant bird. Its prevailing colour is black, but the middle of the wings, the belly, and ſome of the tail feathers are white, or nearly ſo. The beak, which is of a very ſingular form, and of enormous ſize, is diſtinguiſhed near the tip by a large red patch on the upper part; while the baſe or broad part runs far back over the front, ſo as to give the face a ſort of hooded appearance. It is aſtoniſhing that in the preſent improved ſtate of natural hiſtory, we ſhould ſtill be at a loſs for a ſingle ſpecimen of this extraordinary bird, which, ſo far as I am able to diſcover, has ſcarce been imported into Europe ſince the year 1598, nearly at which period it is ſaid to have been brought from the little iſland of Mauritius in the Eaſt Indies. It has been deſcribed by ſeveral authors, as Nieremberg, Bontius, and Cluſius, amongſt the older writers, and by the Count de Buffon, Edwards, Briſſon, and others amongſt the moderns. Were it not, however, for the atteſtations of Herbert and others, who profeſs to have ſeen it in its native regions, together with that of Mr. Willoughby, who aſſures us that he ſaw a ſkin of it in the Muſeum of Sir John Tradeſcant, we might be almoſt inclined to call in queſtion the exiſtence of ſo ſingular an animal. The original figure above mentioned, and which has been repeated by ſo many authors, is preſerved in the Britiſh Muſeum. This bird is ſaid to be granivorous and of a gentle nature. With reſpect to its merit as an article of food,

the

the opinion of authors ſeems to vary; ſome repreſenting it as tough and unpleaſant, while others conſider it as by no means ill adapted for the table; eſpecially the breaſt, which, according to Bontius, is of ſuch a ſize that three or four of them are enough for a very large company. It is an inhabitant of Africa and the Eaſt-Indian iſlands.

After all, can it be poſſible that an Albatroſs, (Diomedea exulans Lin.) not fully grown, and inaccurately repreſented by a draughtſman, may have given riſe to the ſuppoſed exiſtence of the Dodo? If this be granted, we muſt ſurely admit an uncommon degree of careleſſneſs in the painter, who could thus neglect to expreſs the webs on the feet of the Albatroſs, as well as to repreſent the wings extremely large and long, inſtead of ſmall and ſhort; together with other particulars in which the two birds can by no means be made to agree. Yet, on the other hand, it is undeniable that the general appearance of the beak of an Albatroſs is not greatly diſſimilar to that of the ſuppoſed Dodo. And if we contemplate a young or half-grown ſpecimen of the great Albatroſs, before it has arrived at its proper colour, and while there is a mixture of black and white on the wings and other parts, and to this ſuperadd the heavy and crouching poſture in which it ſometimes appears, it will perhaps ſeem not abſolutely impoſſible that an erroneous ſketch from ſuch a bird may have been the baſis on which the exiſtence of the Dodo has hitherto ſtood. Charleton in his *Onomaſticon Zoicon*, affirms that the bill and head of the Dodo were then in the Muſeum of the Royal Society. This reputed bill of a Dodo may however have been nothing

nothing more than that of an Albatroſs. The ſubject therefore may be ſtill conſidered as in ſome degree doubtful, and it remains to wiſh that the laudable zeal and ſpirited exertions of modern naturaliſts may at length put an end to the uncertainty by importing the real bird into Europe, if it can be found to exiſt.

PENNATULA ARGENTEA.

Character Genericus.

Flores Hydræ, ad marginem denticulatum pinnarum.

Stirps libera, ſubulata, apice pinnata.

Lin. Syſt. Nat. p. 1321.

Character Specificus, &c.

PENNATULA penniformis lanceolata, ſtirpe lævi tereti, pinnis creberrimis imbricatis.

PENNATULA lanceolata pennæ facie, ſtirpe lævi tereti, pinnis creberrimis imbricatis dentatis virgatis.

Soland. et Ellis zooph. p. 67. n. 10.

Inter maximas quæ hactenus notæ ſunt Pennatulas habenda eſt hæc ſpecies, nulli cedens pulchritudine: eſt enim argenteo-alba, utrinque ſuper partes expanſas ſeu penniformes lineis aterrimis eleganter ſtriata. Rariſſima eſt, et maria incolit Indica. Delineata eſt figura magnitudine naturali ab eximio ſpecimine quod ſuppeditavit Muſeum Britannicum.

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THE

SILVER SEA-PEN.

GENERIC CHARACTER.

Animal free, or locomotive.

Body (generally) expanding into proceſſes on the upper part.

Proceſſes or branches furniſhed with rows of tubular denticles.

Polype-head proceeding from each tube.

SPECIFIC CHARACTER, &c.

LANCEOLATE FEATHER-SHAPED PENNATULA, with round ſmooth ſtem and thick-ſet imbricated pinnules.

SILVER SEA-PEN.

Ellis. and Soland: zooph. p. 66. t. 8. f. 1. 2. 3.

Of all the Pennatulæ yet known the preſent is one of the largeſt as well as the moſt ſpecious in its appearance; being of a beautiful ſilvery white, elegantly ſtriated on each of the feather-like proceſſes with lines or ſtreaks

ſtreaks of the deepeſt black. It is extremely rare, and is a native of the Indian ſeas. The figure here given is copied from the very fine ſpecimen in the Britiſh Muſeum, and repreſents the animal in its natural ſize.

PAPILIO RIPHEUS.

Character Genericus.

Antennæ apicem verſus craſſiores, ſæpius clavato-capitatæ.

Alæ ſedentis erectæ ſurſumque conniventes (volatu diurno.)

Lin. Syſt. Nat. p. 744.

Character Specificus, &c.

PAPILIO alis ſexdentato-caudatis nigris viridi faſciatis, poſterioribus medio aureo-rubris nigro maculatis.

PALILIO alis ſexdentato-caudatis nigris viridi faſciatis, poſterioribus ſubtus macula ani ferruginea nigro punctata.

Gmel. Syſt. Nat. p. 2235.
Fabr. mant. inſ. 2. p. 6. n. 43.
Cram. pap. 33. t. 385. f. A. B.

Eq. Achiv.

Papilionem in hac tabula depinximus non modo rariſſimum, ſed etiam coloribus ſplendiſſimis omnibus fere ſui generis antecellentem. Haud multis abhinc annis in Europa innotuit hæc ſpecies in perpaucis muſeis vel nunc

nunc conſpicienda. Indiæ Orientalis eſt incola, et in China præcipue invenitur. Papilioni Leilo Linnæi valde affinis eſt tum forma tum coloribus; jactat tamen majorem elegantiam lautioremque varietatem. Eruca, hujus papilionis parens adhuc incognita eſt, veriſimile autem eſt eam erucæ papilionis Leili a Domina Merian inter inſecta Surinamenſia depictæ non abſimilem eſſe.

London. Published Dec.r 1st 1790 by F.P. Nodder & Co.r No.s Brewer Street.

RIPHEUS,

OR THE

ORIENTAL EMPEROR.

Generic Character.

The *Antennæ* or *Horns* thickening towards the upper part, and generally terminating in a knob, or club-ſhaped tip.

The *Wings* (when ſitting) erect, and meeting upwards. (*Flight* diurnal.)

Specific Character.

BLACK BUTTERFLY faſciated with golden-green; the lower wings marked in the middle with a large patch of golden-red ſpotted with black, and furniſhed with ſix elongated or ſubcaudated proceſſes.

Cram. pap. 33. t. 385. f. A. B.

Drury. 2. pl. 23. f. 1. 2.?

We have here repreſented a Papilio, which, excluſive of the extreme rarity of the ſpecies, may perhaps be pronounced the moſt beautiful of that ſplendid tribe. It is but a few years ſince this gay inſect became known in Europe, and it is at preſent ſo rare as to be found in very

very few collections. It is an Eaſt-Indian inſect, but is principally found in China. It is very nearly allied both in ſhape and general diſpoſition of colours to the Papilio Leilus; but is ſtill more elegant, and diſplays a much richer variety of tints. The caterpillar of this butterfly is yet unknown; but it probably bears a near reſemblance to that of Papilio Leilus, which has been figured amongſt the Surinam inſects by Madam Merian.

PICUS ERYTHROCEPHALUS.

Character Genericus.

Roſtrum polyedrum, rectum: apice cuneato.
Nares pennis ſetaceis recumbentibus obtectæ.
Lingua teres, lumbriciformis, longiſſima, mucronata, apice retrorſum aculeata ſetis.
Pedes ſcanſorii.

Lin. Syſt. Nat. p. 173.

Character Specificus, &c.

PICUS capite toto rubro, alis caudaque nigris, abdomine albo.

Lin. Syſt. Nat. p. 174.

PICUS ERYTHROCEPHALUS VIRGINIENSIS.

Briſſ. av. 4. p. 53. n. 19. t. 3. f. 1.

Notiſſima eſt hæc pici ſpecies per omnem fere Septentrionalem Americam, habeturque arvis et pomariis inimiciſſima, zeæque et fructibus magnam ſtragem inferre. Elegans eſt, ſi quæ alia, et concinna. Caput collumque lætiſſime phoenicea. Cætera avis nigrat quaſi polita non ſine nitore quodam cæruleo; ſi excipias pectus, abdomen, uropygium, remigeſque ſe-

cundarios,

cundarios, quæ omnia nivea ſunt, ſcapis eorundem remigum nigris. Roſtrum pedeſque ſaturatim plumbea. Mas et fœmina valde inter ſe ſimiles: fœminæ tamen caput minus rubet, immo interdum fere fuſcum. Magnitudine prope æqualis eſt hæc ſpecies pico maculato majori Anglico, qui picus major Linnæi.

London, Published Jan.ry 1st 1793. by F.P. Nodder & Co N.o 15 Brewer Street.

THE

RED-HEADED WOODPECKER.

Generic Character.

Bill angular, ſtrait, cuneated at the tip.

Noſtrils covered with reflected briſtly feathers.

Tongue cylindric, worm-ſhaped, very long, ſharp-pointed, and (generally) aculeated at the tip with reflex briſtles.

Feet formed for climbing, viz. two toes forward and two backward.

Specific Character, &c.

BLACK WOODPECKER with the head and neck crimſon; breaſt, abdomen, and ſhorter wing-feathers white.

RED-HEADED WOODPECKER.

Cateſb. car. 1. pl. 20.

The ſpecies of Woodpecker here figured is extremely common in moſt parts of North America, and is conſidered as a moſt deſtructive enemy to plantations and orchards, devouring great quantities of maize and fruit. It is a bird of ſingular beauty and neatneſs of appearance. The head and neck are of the richeſt crimſon: the reſt of the bird of a deep poliſhed black, with a blueiſh

blueiſh gloſs, except the breaſt, belly, rump, and ſhorter feathers of the wings, which are ſnow-white. The ſhafts of the white wing-feathers are black. The beak and legs are of a deep lead-colour. The male and female greatly reſemble each other, but the head of the female is leſs rich in colour, and ſometimes even browniſh. The ſize of this ſpecies is nearly that of the greater ſpotted Engliſh Woodpecker, or Picus Major of Linnæus.

RANA ARBOREA.

Character Genericus.

Corpus tetrapodum, nudum, ecaudatum.
Lin. Syſt. Nat. p. 354.

Character Specificus, &c.

RANA corpore lævi: ſubtus punctis contiguis tuberculato, pedibus fiſſis, unguibus orbiculato-dilatatis.
Lin. Syſt. Nat. p. 357.

RANUNCULUS VIRIDIS.
Geſn. piſc. 808.

RANA ARBOREA S. RANUNCULUS VIRIDIS.
Raj. quadr. 251.

In Anglia licet ignoretur bella hæc et parvula ranæ ſpecies, Galliæ tamen, Germaniæ, multiſque Europæis regionibus communis eſt. Inter arborum folia præcipue verſatur, quorum, ut plurimum, paginæ inferiori ſolet adhærere; pedibus ad hoc ipſum mire formatis, cum ſcilicet ſingulus digitus in orbiculum depreſſum deſinat; ita ut rana a glabra quavis ſuperficie ſatis ſecura

cura poſſit pendere. Naſcitur, ut et reliquum genus, primo gyrinus: fœminæ enim, ut ova deponant, arbores deſerunt, et aquas petunt; quo tempore mas ſaccum ſeu globum magnum e gula protrudit, alias vix et ne vix viſibilem.

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THE

TREE FROG.

GENERIC CHARACTER.

Body four-footed, naked, tailed.

SPECIFIC CHARACTER, &c.

GREEN FROG, with unwebbed feet and orbicular flattened toes.

THE TREE FROG.

The beautiful little ſpecies of frog here repreſented is not uncommon in many parts of Europe, as France, Germany, &c. but is not found in England. It reſides amongſt the foliage of trees, and generally adheres to the under ſide of the leaves, the ſtructure of the feet being finely adapted for this power; each toe terminating in an orbicular flattened proceſs, by means of which the animal can apply itſelf with perfect ſecurity to the ſmootheſt ſurface. Like others of its genus, it is firſt produced in the ſtate of a tadpole; the females during the breeding ſeaſon leaving the trees, and betaking themſelves to the water, in order to depoſit their ſpawn. The male during that period has a large inflated gular pouch or globe, which at other times is ſcarce ever viſible.

ACARUS AURATUS.

Character Genericus.

Pedes octo.
Oculi duo ad latera capitis.
Tentacula duo articulata, pediformia.
Lin. Syſt. Nat. p. 1022.

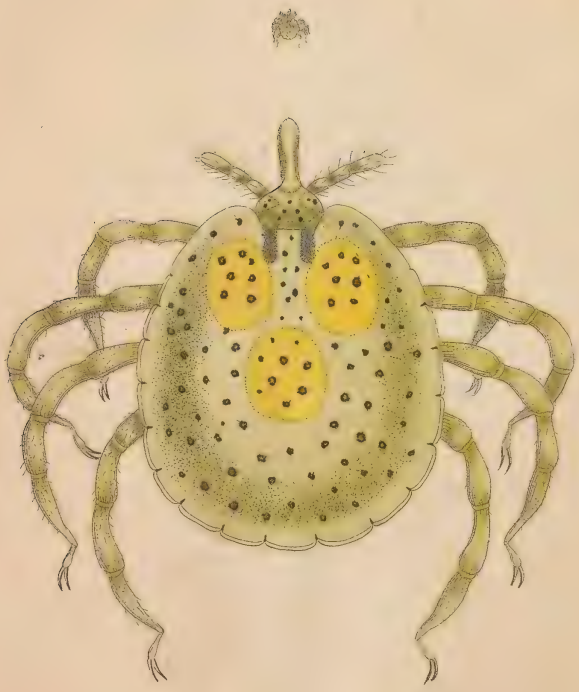
Character Specificus, &c.

ACARUS ORBICULATUS PLANIUSCULUS, aureo-maculatus, ſupra excavato-punctatus, abdomine ſubcrenato.

ACARUS IGUANÆ?
Fabr. ſpec. inſ. 2. p. 485.

Spargi videtur genus Acari per totum orbem, continetque proculdubio multas ſpecies adhuc incognitas, quarum plurimæ ob parvitatem non niſi Lynceo oculo poſſunt diſcerni. Sunt tamen nonnullæ ſpecies quæ cæteras adeo mole ſuperant ut facile etiam modico intervallo percipi poſſint; e. g. Acarus Ricinus Linnæi in canibus frequenter conſpectus, Acarus columbarum in columbis, et acarus qui ob vividum ruborem et ſuperficiem lanuginoſam holoſericus dicitur. Licet diſtinguantur plerique forma ſingulari potius quam pul-

chritudine, ſpeciem tamen exoticam excipiamus neceſſe eſt quam oſtendit tabula non tantum magnitudine naturali, ſed et microſcopio auctam: notas enim gerit hæc non vulgaris ſplendoris; maculas ſcilicet tres in corpore ſuperiori, et interdum plures, colore quodam metallico velut aurato, qui ſplendor præcipue notabilis, ſi immerſum fuerit inſectum in liquore qui vulgo dicitur *ſpiritus vini*. Color imus fuſco-vireſcens, pallet, punctulis minimis nigris corpori impreſſis. Abdominis margo leviſſime crenata ſerie macularum nigrarum. Caput magna ex parte conformatum eſt eodem fere modo quo acari columbini, cui in hoc auratus valde videtur affinis; ope nempe roſtri, cujus ſuperficies inferior præcipue ſerrata, uncis retro ſpectantibus, animali quod vexare cupit arctiſſime adhærens. Summa autem eſt ſimilitudo inter hanc ſpeciem et Acarum Iguanæ Fabricii, quem memorat ille detectum eſſe mordicus affixum ſaculo gulari Lacertæ Iguanæ Linnæi, quæ poſtea in ſpiritu vini aſſervabatur. Simili modo auratus ſe affigit Colubro Najæ Linnæi, cujus ſpecimina eodem liquore condita remanent. Veriſimile eſt ſpeciem eſſe novam, niſi potius varietatem eſſe Acari Iguanæ de quo jam diximus. Memorat Seba ſerpentes interdum acaris infeſtari, ſed, quod vitium erat ſui temporis, laxe et ambigue loquens, non acaros ſed pediculos eos vocat.



London Published Jan.ry 1st 1793 by J.D. Riddler & Co. No.15 Bruton Street.

THE

GOLD-SPOTTED ACARUS.

Generic Character.

Eight *Legs*.

Two *Eyes*, ſituated on the ſides of the head.

Two *Tentacula*, jointed, and ſhaped like feet.

Specific Character.

ORBICULAR FLATTISH ACARUS, with gold-coloured ſpots; the body marked above by numerous impreſſed points; the abdomen ſubcrenated.

The genus Acarus, which ſeems to be diffuſed throughout all parts of the world, and of which a great many ſpecies muſt doubtleſs remain ſtill undiſcovered, is, in general, diſtinguiſhed by the extraordinary minuteneſs of its appearance; ſeveral kinds being ſcarce viſible without cloſe inſpection, and eaſily eſcaping the notice of a common eye. Some ſpecies however ſo far exceed the reſt of the genus in ſize as to be ſufficiently conſpicuous even at a moderate diſtance; for inſtance, the Acarus Ricinus or common tick, ſo frequently ſeen on dogs; the Acarus columbarum, not leſs plentiful on pigeons and ſome other animals; and the Acarus holoſericeus or velvet mite, ſo remarkable for its bright ſcarlet colour and downy ſurface. In general the Acari are much more

more diſtinguiſhed by the ſingularity than the beauty of their appearance. The very curious exotic ſpecies here figured, both in its natural ſize and magnified by the microſcope, is an exception to this general rule, and is adorned with marks of no inconſiderable ſplendor; the upper part of the body being furniſhed with three and ſometimes more large ſpots of a golden tinge, accompanied by a metallic luſtre. This appearance is however moſt conſpicuous while the animal is immerſed in ſpirits of wine. The general colour of this ſpecies is a pale greeniſh-brown, variegated with minute ſpecks of black, forming ſo many impreſſed ſpots on the ſurface of the body. The edge of the abdomen is very ſlightly notched or indented by a row of marks of the ſame colour. In the general form of the apparatus at the head, this ſpecies bears a moſt ſtriking affinity to the pigeon-tick or Acarus columbarum, being furniſhed like that animal, with a ſerrated ſnout, the proceſſes of which lying on the under ſurface, and pointing backwards, enable it to adhere with great firmneſs to the ſkin of the creature it infeſts. The ſpecies to which it bears the greateſt reſemblance is the Acarus Iguanæ of Fabricius, which is by that author commemorated as having been found ſtrongly affixed to the gular pouch of the Lacerta Iguana of Linnæus preſerved in ſpirits. The preſent ſpecies is found adhering in the ſame manner to ſpecimens preſerved in ſpirits of the Coluber Naja or Cobra de Capello. It is moſt probably a new ſpecies, unleſs it ſhould be regarded as a variety of the A. Iguanæ of Fabricius. The circumſtance of ſnakes being ſometimes infeſted by Acari is mentioned by Seba, who, in the uſual inaccurate ſtyle of his time, gives them the title of Pediculi.

ALCEDO ISPIDA.

Character Genericus.

Roſtrum trigonum, craſſum, rectum, longum.
Lingua carnoſa, breviſſima, plana, acuta.
Pedes greſſorii *pleriſque*.

Lin. Syſt. Nat. p. 178.

Character Specificus, &c.

ALCEDO BRACHYURA, ſupra cyanea, ſubtus fulva, loris rufis.

Lin. Syſt. Nat. p. 179.

ALCEDO BRACHYURA SUBCRISTATA CÆRULEA, ſubtus rufa, loris fulvis, vertice nigro undulato, macula aurium gulaque albis.

Lath. ind. orn. p. 252.

ALCYON.

Geſn. av. 85.

ISPIDA.

Geſn. av. 571.
Will. orn. 101.

Non modo avium Britannicarum ſed et Europæarum nitidiſſima eſt et lautiſſima Alcedo Iſpida, exceptis Linnæi Coracia Garrula Meropeque Apiaſtro, quas neutras

genuit Britannia, *hanc* licet advenam ad nos rariſſimus caſus appulerit. Cum piſciculis veſcatur Alcedo, rivos ideo et loca impertubata quærit, ſolitudinis et ſilentii cupida; quam ob cauſam melancholiæ ſymbolum habetur, exemplumque egregiæ pulchritudinis protervos oculos ſedulo evitantis, cuique non male convenit celeberrimi poetæ votum " Flumina amem ſylvaſque."

Turbata motu fertur celerrimo vix ac ne vix horrizontem ſuperans, coloremque adeo vividum in tranſitu oſtentat, ut alis papilionis Menelai fere æqualem diceres. Interdum ſuſpenſa ſuper aquas alis expanſis rapideque vibratis more Niſi conſpicitur, fulgores jactans tunc temporis præter ſolitum ſplendidos. Inter ripas fluviorum, interdum etiam aquarum ſtagnantium, in foraminibus alte effoſſis nidificat, ova deponens quinque, ſeptem, vel etiam novem, Inter marem et feminam fere ambigua eſt ſimilitudo. Alcedo plerumque vera Halcyon creditur, quam nidum ſluitantem conſtruere putabant veteres; qui in hoc fortaſſe errarunt, quod nidum Colymbi alicujus pro nido Halcyonis habuerint. Colymborum enim certæ ſpecies nidos ſluitantes e plantis aquaticis revera contexunt, qui juxta riparum aggeres inter arundines laxius ſiti, ſuper aquas nonnunquam a ripa huc illuc feruntur.

London. Published February 1st 1795 by T. P. Nodder & Co. No. 18 Bruton Street.

THE

COMMON KINGFISHER.

Generic Character.

Bill trigonal, thick, ſtrait, long, ſharp-pointed.
Tongue fleſhy, very ſhort, flat, ſharp-pointed.
Feet (in moſt ſpecies) greſſorial, *i. e.* three toes forward and one backward, and the three lower joints of the middle toe cloſely jointed to thoſe of the outmoſt.

Specific Character, &c.

SHORT-TAILED KINGFISHER, blue above, fulvous beneath, with rufous lores and white auricular ſpot.

THE COMMON KINGFISHER.

Lath. Syn. 1. p. 626.
Will. orn. 146.

LE MARTIN-PÊCHEUR.

Buff. oiſ. 7. p. 164.
Pl. enl. 77.

The Alcedo Iſpida or common Kingfiſher is by far the moſt brilliant of the Britiſh birds: indeed no other bird of Europe can equal it in livelineſs of colours ex-

cept the Roller, (Coracias Garrula. Lin.) and the Bee-Eater, (Merops Apiaſter. Lin.) neither of which are natives of Britain, though the former has ſometimes been ſeen as an accidental ſtraggler. The Kingfiſher is a bird of a retired and ſolitary diſpoſition, and as from the nature of its food, (which conſiſts entirely of ſmall fiſh,) it is moſt commonly found near ſtreams and unfrequented places, it has therefore been fixed upon as an emblem of melancholy, and an example of dazzling beauty, in a ſtate of voluntary retirement. "Flumina amem ſylvaſque" ſeems to be its motto, and it is rarely ſeen except in ſuch ſituations. If diſturbed, it darts along in a rapid horizontal motion, and diſplays a tranſitory glance of colour which is almoſt equal in luſtre to the wings of the Papilio Menelaus. Sometimes it may be ſeen ſuſpended over the ſtream in the manner of a hawk, and rapidly vibrating its expanded wings, when its colour is ſtill more beautifully conſpicuous. The Kingfiſher builds in deep holes in the banks of rivers, and ſometimes of ſtagnant waters. It lays from five to ſeven or even nine eggs. The male and female bear an extreme reſemblance to each other. The Kingfiſher is generally ſuppoſed to be the true Halcyon of the ancients, which was believed to build a floating neſt. In order to accoûnt for this erroneous idea, we need only ſuppoſe that the neſts of ſome of the Colymbi or Grebes were miſtaken for thoſe of the Halcyon: ſome of the Colymbi do really build floating neſts of aquatic plants, &c., which though placed amongſt the reeds contiguous to the banks, are yet ſo looſe as occaſionally to be carried to ſome little diſtance on the ſurface of the water.

GYMNOTUS ELECTRICUS.

Character Genericus.

Caput operculis lateralibus.
Tentacula duo ad labium ſuperius.
Oculi cute communi tecti.
Membrana Branchioſtega radiis quinque.
Corpus compreſſum, ſubtus pinna carinatum.
Lin. Syſt. Nat. p. 144.

Character Specificus, &c.

GYMNOTUS NUDUS, dorſo apterygio, pinna caudali obtuſiſſima anali annexa.
Lin. Syſt. Nat. p. 144.

GYMNOTUS CAUDA TRUNCATA, maxilla inferiore longiore.
Gron. zooph. 168.

GYMNOTUS NIGRICANS, cauda curta obtuſa.
Seb. muſ. 3. p. 108. t. 34. f. 6.
Bloch. auſt. Fiſch. 2. p. 43. t. 156.

Vim illam electricam quam pro arbitrio emittere poteſt Torpedo, quamque illi procul-dubio ad repellendas injurias dedit Natura, admirati ſunt antiqui ſimul ac recentiores

recentiores phyſici. Tacta Torpedine, ictum illico violentum ſentit hoſtis, probaturque ab experimentis, iiſque præcipue Domini Walſh in Actis Anglicis, hunc ictum vere et omnino eſſe electricum, nullo modo diverſum ab illo qui a machina deducitur; poſſeque cum plurimis, ſi conjunctæ ſint manus, eodem temporis puncto communicari. Piſcis vero quem nunc deſcribere pergimus, vel ipſam Torpedinem vi ſua electrica longe antecellit: quos enim in fluviis ſuis natalibus ſanus valenſque tetigerit, non ſolum motu ſenſuque per breve aliquod tempus privat; ſed fertur inſuper illos qui parum fauſte in iiſdem aquis nataverint, ab immodico ejus impetu ſubito percitos interdum periiſſe. Mira hac facultate vitam ſuſtentat Gymnotus; piſceſque, ſeu alia animalia prope ludentia quæ tactu ſuo obtorpuerit, corripit ſtatim devoratque tyrannus ille quarum electricus. Paucis abhinc annis viva horum piſcium ſpecimina in Angliam illata ſunt, et Londini aliiſque locis publice ſpectabantur. Vultu eſt Gymnotus tetrico et injucundo, primoque intuitu anguillam magnam quodammodo repræſentat, Corpus ſuum vel contrahere poteſt vel producere; fibras nempe aliquot muſculoſas conſtringendo ſeu remittendo. Colore nigricat. Caput illi eſt craſſum, corpore paulo latius, depreſſiuſque, ſeu complanatum. Oculi valde exigui; Os magnum: utriſque maxillis inſunt dentes parvi, acuti, numeroſiſſimi. Circa caput, præcipue ſinciput, varia ſunt foramina. Totum animal muco lubrico, muco anguillæ non abſimili tegitur. Squamæ illi viſibiles nullæ ſunt; detegi tamen fortaſſe poſſent, ſi cutis exſiccata et expanſa eſſet, more cutis anguillæ. Alii ſunt hujus generis piſces, qui tamen Gymnoto electrico adeo ſunt abſimiles ut, excepto

charactere generico, cum illo nequaquam conveniant, omnique vi electrica penitus carent. Americam Auſtralem incolit Gymnotus electricus, præcipue autem in Rivo Surinam in Güiana invenitur.

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THE

ELECTRICAL GYMNOTUS.

Generic Character.

Head furniſhed with lateral opercula.
Two *Tentacula* at the upper lip.
Eyes covered by a ſkin.
Branchioſtegous Membrane with five rays.
Body compreſſed, and carinated by a fin beneath.

Specific Character, &c.

BLACKISH GYMNOTUS, without dorſal fin; the caudal fin extremely obtuſe and jointed to the anal one.

THE ELECTRICAL EEL.

The power with which Nature has armed the Torpedo, is ſuch as to have rendered it the wonder of the ancient as well as the modern world. This power conſiſts in a natural electricity, which is exerted at the pleaſure of the animal, in ſuch a manner as to preſerve it in great meaſure ſecure from all attacks of other creatures; ſince no ſooner is it touched than a very ſtrong electric ſhock is inſtantly felt by the invader.

That

That it is a real electric ſhock, not differing from that which is received from an electrical machine, has been clearly proved by repeated experiments; particularly by thoſe of Mr. Walſh, related in the Philoſophical Tranſactions; from which it appears that the ſhock is communicated at the ſame inſtant to a number of perſons joining hands. The fiſh however which we now proceed to deſcribe, is poſſeſſed of a much greater ſhare of natural electricity than the Torpedo: ſo powerful is the ſhock which this fiſh, in its native rivers, and in full vigour, is capable of inflicting, that it is ſaid to deprive almoſt entirely of ſenſe and motion for ſome minutes, ſuch as are expoſed to its approach, and that, in conſequence of this violent exertion of its electricity, it has ſometimes proved fatal to ſuch as have incautiouſly ventured to ſwim in the ſame water. It is by the power of electricity that the Gymnotus ſupports its exiſtence: whatever ſmaller fiſh or other animals happen to approach it are inſtantly ſtupefied, and fall an eaſy prey to the electrical tyrant.

Some years ago ſome of theſe curious fiſh were brought alive from Surinam into this kingdom, and were publickly exhibited at London and elſewhere. It is a fiſh of a diſagreeable appearance, and on a curſory view is not much unlike a large eel. Its colour is blackiſh, and it has a power of ſhortening at pleaſure the length of its body, by the contraction of its muſcular fibres, and again relaxing and extending itſelf to its former length. The head is ſhort, ſomewhat broader than the body, and a little depreſſed or flattened: the eyes are very ſmall; the mouth large, and both jaws are furniſhed with a great many very ſmall ſharp teeth.

About

About the head, eſpecially on the fore-part, ſeveral foramina or pores appear. The whole animal is coated with a ſort of mucus, not unlike that of an eel. The Gymnotus is deſtitute of apparent ſcales; but the probability is that in a dried ſkin prepared in the manner of an eel-ſkin the ſcales might be found.

There are ſome other ſpecies of Gymnoti, which differ very much in their appearance from this: they have no electric power, and are only approximated to this ſpecies by their generic character.

The Gymnotus electricus is a native of South America, and is principally found in the river Surinam in the province Guiana.

SCARABÆUS MIDAS.

Character Genericus.

Antennæ clavatæ capitulo fiſſili.
Tibiæ anticæ ſæpius dentatæ.

Lin. Syſt. Nat. p. 541.

Character Specificus, &c.

SCARABÆUS exſcutellatus, thorace tricorni, clypeo ſinuato bicorni.

Fab. Syſt. Ent. p. 21.
—— *Spec. inſ.* p. 24.
Gmel. Syſt. Nat. p. 1534.

Varium adeo et multiforme eſt totum ſcarabæorum genus, cornuum partiumque prominentiorum tanta eſt et fere incredibilis diverſitas, ut in iis generandis pene luſiſſe naturam putemus. Quod ſi majoribus animalibus mole æquales eſſent ſcarabæi, ipſa poetarum et pictorum monſtra, quibus quælibet audendi fingendique poteſtas, a revera exiſtentibus vincerentur. Aliis caput tantum cornutum eſt, aliis tantum thorax, aliis tum caput tum thorax. Inter rariſſimas vero ſimul ac maxime ſingulares ſpecies eminet ſcarabæus iſte in tabula, qui Americam incolit; præcipue Auſtralem? Color eſt aterrimus:

mus: corporis inferiora, præsertim versus pectus et insitiones crurum tomento obscure ferrugineo vestiuntur. Elytra seu alarum thecæ exteriores striis paucis longitudinalibus notantur. Perpulchrum rari hujus insecti specimen in Museo Leveriano conspicitur.

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THE

MIDAS BEETLE.

Generic Character.

Antennæ divided at the tip or head into ſeveral lamellæ.

Tibiæ, or ſecond joints of the fore-legs generally toothed.

Specific Character.

NON-SCUTELLATED BEETLE, with broad treble-horned thorax and double horned ſinuated clypeus.

In the beetle tribe we are preſented with a wonderful, and, as it were, almoſt capricious diverſity of form. Every variation of horn and proceſs that imagination can conceive being exemplified in the different ſpecies of this extenſive genus; and if their ſize approached to that of the larger animals, even the monſters of romance would be exceeded by the realities of nature. In ſome the head alone is horned, in others the thorax only; and in others both head and thorax are furniſhed with theſe appendages. Amonſt the rareſt, as well as the moſt ſingular ſpecies, may be reckoned the beetle here

here repreſented, which is a native of America, and particularly of South America? Its colour is a deep black; but the under parts, eſpecially toward the breaſt and the inſertions of the legs, are coated with a dark ferruginous down. The Elytra or wing-ſheaths are marked by a few longitudinal ſtriæ. A very fine ſpecimen of this rare inſect is to be found in the Leverian Muſeum.

PSITTACUS MELANOPTERUS.

Character Genericus.

Roſtrum aduncum: mandibula ſuperiore mobili; cera inſtructa.
Nares in roſtri baſi.
Lingua carnoſa, obtuſa, integra.
Pedes ſcanſorii.

Character Specificus, &c.

PSITTACUS pallide viridis, dorſo aliſque nigris, remigibus ſecundariis luteis apice cæruleis, rectricibus purpureis faſcia nigra.

Lath. ind. orn. p. 132.

PSITTACUS pallide viridis, dorſo, tectricibus alarum, caudæ faſcia remigibuſque primariis nigris, ſecundariis flaveſcentibus cæruleo-punctatis.

Gmel. Syſt. Nat. p. 350.

Pſittacus Melanopterus, coloribus elegantiſſimis uberrime ornatus, inſulam Javam inhabitat, in Batavia præcipue conſpectus. In tabula exprimitur avis magnitudine prope naturali. In muſeis rariſſima eſt hæc ſpecies. Specimen ipſiſſimum, unde hæc noſtra figura depicta eſt, in Muſeo Britannico aſſervatur.

THE BLACK-WINGED PARRAKEET.

Generic Character.

Bill hooked. Upper mandible moveable.
Noſtrils round, placed in the baſe of the bill.
Tongue fleſhy, broad, blunt at the end.
Legs ſhort. Toes formed for climbing, viz. two forward and two backward.

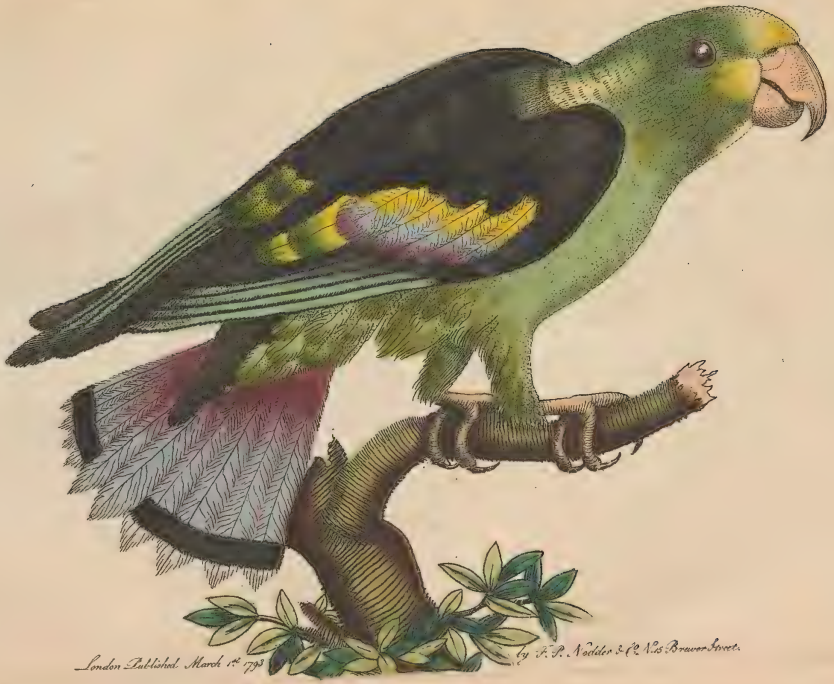
Specific Character, &c.

PALE-GREEN PARRAKEET, with black back and wings; the ſecondary wing-feathers yellow tipped with blue; the tail lilac-coloured and croſſed by a black bar.

PERRUCHE à ailes variées.
Buff. 6. p. 172.

PETITE PERRUCHE de Batavia.
Pl. enl. 791. f. 1.

The Pſittacus melanopterus, ſo remarkable for the elegance of its colours, is a native of the iſland of Java, and is found at Batavia. The plate repreſents it nearly of its natural ſize. It is a ſpecies very rarely ſeen in collections. The beautiful ſpecimen from which this figure was executed is in the Britiſh Muſeum.



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BALÆNA MYSTICETUS.

Character Genericus.

Dentium loco in maxilla ſuperiore laminæ corneæ. *Fiſtula* duplex.

Lin. Syſt. Nat. p. 105.

Character Specificus, &c.

BALÆNA naribus flexuoſis in medio capite, dorſo impinni.

Lin. Syſt. Nat. p. 105.

BALÆNA dorſo impinni, fiſtula in medio capite, dorſo caudam verſus carinato.

Gron. zooph. 139.

BALÆNA vulgaris edentula, dorſo non pinnato.

Raij. piſc. p. 16. & 6.

BALÆNA vera Rondeletii, *et* Balæna Rondeletii, Geſneri et aliorum.

Will. piſc. p. 38. 35.

Licet ob formæ externæ ſimilitudinem et vitam æquoream videatur fortaſſe inter piſces et animalia cetaria commune eſſe quoddam cognationis vinculum, revera tamen *mammalia aquatica* habenda ſunt. Utcun-

que enim corporis figura, quodque pedibus carere putentur, a reliquis quadrupedibus primo visu longe discrepent, sunt tamen iis revera pedes, quamvis non extrinsecus visibiles; cum habeant pinnæ duæ anteriores ossa iis analoga quibus instruuntur pedes antici cæterorum quadrupedum, quibus vero postici, ea contineant duæ posteriores, quæ in cauda quasi coadunatæ pinnam unicam horizontalem videntur efficere. Similis quoque est partium internarum conformatio ac in aliis mammalibus, pulmonum scilicet, intestinorum, &c. Tepet præterea sanguis, ut in illis, feminæque pullos lacte alunt. Tanta est in omnibus cetariis characterum generalium similitudo, ut in uno genere fere reponi possent. Ut vero species facilius dignoscerentur, Linnæo et omnibus fere physicis recentioribus placuit illa in quatuor genera dividere, quæ notis secundariis, situ nempe dentium, fistularum in capite, aliisque signis distinguuntur, quæ vocantur *Monodon*, *Balæna*, *Physeter*, *Delphinus*. Horum in præcipuis Balæna et Physetere continentur species maximæ. Omnium princeps est Balæna Mysticetus, quo sane majus monstrum nec mare nec tellus generat, ni verum sit quod de Krakene narratur. Antequam numerum redegisset balænarum, quem jam optime callent septentrionales populi, capiendi modus, conspecti sæpius sunt Mysticeti longitudine centum pedum. Raro nunc dierum videntur qui pedes sexaginta superant. Mysticeto vix excogitari possit aliud animal rudius et informius. Constat enim fere tertia pars e capite. Os monstrose amplum. Lingua interdum pedes octodecim seu viginti longa. Oculi pro corpore minutissimi. In maxilla superiore sitæ sunt numerosissimæ laminæ corneæ serie æquali dispositæ, quæ vulgo *os cetaceum*

cetaceum vocantur. Per fiſtulam, quæ duplex in ſummo capite, quaſi columnam aquæ in altum aſſurgentem incredibili vi eructat. Color communis eſt livide albido-cinereus, dorſo pinniſque obſcurioribus et fere ſubnigricantibus. Variat autem ut et alia pleraque animalia, colore plus minuſve ſaturato. Habitat ut plurimum, in maribus ſeptentrionalibus, ibique arte omnigena in ejus perniciem conſpiratur: in merce enim eſt oleum-cetarium. Victitat præcipue Meduſis, Sepiis, aliiſque ejuſmodi.

Dolendum eſt poetas, utcunque legentium animos ſuavitate delectent, et percellant ſublimitate, in deſcribendis iis quæ ad hiſtoriam naturalem ſpectant epitheta adeo inſcite ſeligere, ut ipſam rei de qua canunt imaginem ſæpius a vero detorqueant. Hoc nullibi manifeſtius quam in deſcriptione illa, grandi certe et magnifica, quæ apud Miltonum legitur balænæ dormientis, cui tamen adjungitur epitheton falſum omnino et incongruum.

——————————— " horrida ponti
Bellua, quæ fluctus inter mirabile Monſtrum
Navigat, æquoreæque exultat maxima gentis.
Olim hæc noctivagæ rectori viſa biremis,
Norvegii ſalis in ſpuma dum forte quieſcit,
(Sic perhibent nautæ) vaſta inſula creditur, amplo
Immenſum porrecta ſinu ; latus anchora prenſat
Squamoſum, et tuta fruitur ſtatione Magiſter,
Dum pontum obvelant tenebræ, luxque alma moratur."
Parad. amiſs. lat. reddit. a Dobson.

Nulli autem in toto genere contingunt ſquamæ. At ſi forte me putet aliquis hypercriticum, et voluiſſe Miltonum balænam non vere ſquamiferam, ſed ſuperficiem tantum

tantum habentem rudem et ſcabroſam, qualis ſcilicet eſt cortex arboris, huic opinioni invitus aſſentiar: quod enim illum in errorem duxerit non e longinquo petendum, figura nempe in Geſneri operibus, quæ praviſſime efficta quaſi magnis ſquamis veſtita videtur, cuique præterea inſcribitur "Nautæ in dorſo Cetorum, quæ inſulas putant, anchoras figentes, ſæpe periclitantur." Vix poſſit dubitari quin poeta noſtras celeberrimus, qui multifaria imbutus ſcientia, librorum quaſi gurges erat et helluo, Geſneri ſcriptis, grandi tunc temporis ſcientiæ naturalis theſauro, optime eſſet verſatus, quodque balæna imago quam ibi viderat altius in animo inhæſerat.

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THE

MYSTICETUS,

OR

GREAT NORTHERN WHALE.

Generic Character.

No *Teeth*, inſtead of which are ſituated horny laminæ in the upper jaw.

A double *Fiſtula* or ſpiracle on the top of the head.

Specific Character, &c.

TOOTHLESS WHALE, blackiſh above, white below, without dorſal fin.

The COMMON or GREENLAND WHALE.

The COMMON WHALE.

Pennant. Arct. Zool. ſup. 101. n. 5.

The WHALEBONE WHALE.

Phil. tranſ. abr. 7. p. 424.

The cetaceous animals, however nearly approximated to fiſhes by external form and reſidence in the waters, are in reality to be conſidered as aquatic quadrupeds: for though from their general ſhape and ſeeming want of

of feet they appear at firſt view widely removed from the reſt of the Mammalia, yet theſe parts really exiſt, though not outwardly viſible; the two anterior fins being furniſhed with bones like the feet of other quadrupeds, and the two poſterior ones (which from their ſituation, appear to form but one horizontal caudal fin,) containing the analogous bones of the two hind feet. All the internal parts of this tribe of animals are likewiſe formed on the ſame plan as in other Mammalia: having ſimilar lungs, inteſtines, &c. They have alſo warm blood, and the females, like other quadrupeds, ſuckle their young. The general characters of all the Cetacea are ſo ſimilar, that, in an enlarged view, they might all form one great genus; but as this perhaps would not facilitate the diſtinction of the ſeveral ſpecies, Linnæus and moſt other modern naturaliſts have agreed in dividing the cetaceous animals into different genera, diſtinguiſhed by ſecondary characters, as the ſituation of the teeth and of the ſpouting-hole or fiſtula on the head. This diſtribution admits of four diſtinct genera, viz. *Monodon*, *Balæna*, *Phyſeter*, *Delphinus*. Of theſe the genera of Balæna and Phyſeter are the two principal, and contain the largeſt animals. The Balæna Myſticetus, or great northern Whale, is as it were the chief of the whole tribe, and (unleſs the Kraken be not a fabulous exiſtence,) is the largeſt of all known animals either of land or ſea. Before the northern whale-fiſheries had reduced the number of this ſpecies, it was no very uncommon circumſtance to find ſpecimens of an hundred feet in length. Theſe are now rarely ſeen, and it is not often that they are found of more than ſixty feet.

In

In its general ſhape and appearance this animal is peculiarly uncouth; the head conſtituting nearly a third of the whole maſs. The mouth is of prodigious amplitude; the tongue ſometimes meaſuring eighteen or twenty feet in length. The eyes moſt diſproportionably ſmall. In the upper jaw is a vaſt number of very long horny laminæ diſpoſed in regular ſeries: theſe are popularly known by the name of whale-bone. On the top of the head is a double fiſtula or ſpout-hole, through which the enormous animal diſcharges the water at intervals, cauſing the appearance of a marine jet d'eau aſcending to a great height in the air. The general colour of this ſpecies is a pale whitiſh aſh, deeper on the back and fins, (where indeed it is nearly blackiſh.) Like moſt other animals, however, it varies in intenſity of colour. Its general reſidence is in the northern ſeas, where it has long conſtituted the principal trade of the whale or oil fiſhery. Its food conſiſts chiefly of different ſpecies of Sepiæ, Meduſæ, &c.

It is to be lamented that in the poetical deſcriptions of various ſtriking ſcenes in natural hiſtory, the epithets by which many objects are diſtinguiſhed are, for want of due knowledge of the ſubject, improperly choſen, and utterly inconſonant with the character of the things intended; by which means the deſcription, however beautiful in point of language, fails in point of accuracy. This is no where more ſtrikingly illuſtrated than in the auguſt lines of Milton, in which the deſcription of a ſleeping whale is injured by an epithet of all others the leaſt according with the nature of the animal.

——————————— "that ſea-beaſt
Leviathan, which God of all his works
Created

Created hugeſt that ſwim th' ocean ſtream:
Him, haply ſlumb'ring on the Norway foam,
The pilot of ſome ſmall night-founder'd ſkiff
Deeming ſome iſland, oft, as ſeamen tell,
With fixed anchor in his ſcaly rind,
Moors by his ſide under the lee, while night
Inveſts the ſea, and wiſhed morn delays."

None of the cetaceous tribe are furniſhed with ſcales, or any thing analogous to them. It muſt be acknowledged however that this obſervation may appear in no ſmall degree hypercritical, and that Milton by the expreſſion of *ſcaly rind* might only mean rough or ſcaly in the ſame ſenſe that thoſe epithets are applied to the bark of a tree, or any irregular ſurface. There can be little doubt however that real and proper ſcales were intended by the poet; nor is it difficult to diſcover the particular circumſtance which impreſſed Milton with this erroneous idea, viz. a figure in the works of Geſner, ſo injudiciouſly expreſſed as to appear on a curſory view as if coated with large ſcales, with a veſſel near it with harpooners, &c. over which is the obſervation of ſailors often miſtaking a whale for an iſland, and thus endangering themſelves by attempting to anchor on it. As the general learning and extenſive reading of our great poet are ſo well known, it can hardly be doubted that he was converſant with the writings of Geſner, whoſe work was then the great depoſitory of natural knowledge, and that the figure and deſcription there given left a laſting impreſſion on his mind.

CERAMBYX LONGIMANUS.

Character Genericus.

Antennæ attenuatæ.
Thorax ſpinoſus aut gibbus.
Elytra linearia.

Lin. Syſt. Nat. p. 621.

Character Specificus, &c.

CERAMBYX thorace ſpinis mobilibus, elytris baſi unidentatis apiceque bidentatis, antennis longis.

Lin. Syſt. Nat. p. 621.

SCARABÆUS CAPRICORNUS maximus nigricans, faſciis elytrorum coccineis et flavis.

Sloan. jam. 2. p. 209.
Merian Surin. t. 28.
Aubent. Pl. Enl. 64. f. 1.

Cum ad genus *Cerambyx*, quo neſcio an ullum aliud contineant Coleoptera mirabilius, numeroſiſſimæ referantur ſpecies; perpaucæ tamen ſunt quæ longimanum vel magnitudine vel colorum pulchritudine poſſunt ſuperare. In tabula depingitur hoc inſectum magnitudine naturali. Americæ Auſtralis eſt incola. Elytrorum color

color primarius eſt fuſcus, ſeu potius nigricans, ſtriis maculiſque ſubflavis et aurantiis, et in nonnullis ſpeciminibus, ſubrubris interſtinctus. Caput etiam cum thorace ſimili modo variatur; cruraque eodem colore faſciata. Elytrorum ſuperficies propius conſpecta villo ſeu tomento breviſſimo veſtitur. Speciem hanc præcipue diſtinguunt crura antica ultra ſolitum producta; quæ tamen longiora ſunt mari quam feminæ. Cerambyces, ut et alia Coleoptera, ab ovis oriuntur, larvarumque mutationes ſubeunt, quæ plerumque albo-flaveſcunt, et in putridis arborum truncis potiſſimum degunt.

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THE

LONG-LEGGED CERAMBYX.

Generic Character.

Antennæ attenuated.
Thorax either ſpinous or gibbous.
Elytra linear.

Specific Character, &c.

BLACKISH CERAMBYX with elytra faſciated with red and yellow, with very long fore-legs and antennæ.

NOCOONACA.

Grew. muſ. p. 163. t. 13.

L'ARLEQUIN DE CAYENNE.

Pl. enl. 64. f. 1.

The genus Cerambyx, one of the moſt curious in the whole tribe of coleopterous inſects, contains a prodigious number of ſpecies; many of which are extremely remarkable for the ſingularity of their appearance. There are however few which can exceed in this reſpect the ſpecies here repreſented, which is alſo one of the largeſt of the genus, and is highly diſtinguiſhed by

by the beauty of its colours. The figure ſhews it of its natural ſize. It is a native of South America: the ground-colour of the elytra or wing-caſes is a browniſh black, varied with ſtreaks and markings of pale yellow and orange, which in ſome ſpecimens approaches to red. The head and thorax of the inſect are alſo marked in the ſame manner, and the legs are croſſed by a band of the ſame colours. The ſurface of the wing-caſes, when narrowly viewed, is of a velvetty appearance, or coated with a fine upright villus. This ſpecies is principally diſtinguiſhed by the great length of the fore-legs, which are ſtill longer in the male inſect than the female. The Cerambyces, like other inſects of the beetle-tribe, proceed from eggs, and paſs through the ſtate of larvæ, which are generally of a yellowiſh white colour, and principally reſide in the decayed parts of trees.

AMPELIS GARRULUS.

Character Genericus.

Roſtrum rectum, convexum: Mandibula ſuperiore longiore, ſubincurvata, utrinque emarginata.
Lingua acuta, cartilaginea, bifida.
Lin. Syſt. Nat. p. 297.

Character Specificus, &c.

AMPELIS occipite criſtato, remigibus ſecundariis apice membranaceo colorato.
Lin. Syſt. Nat. p. 297.

GARRULUS BOHEMICUS.
Geſn. av. 703.
Will. orn. 90. t. 20.

LANIUS GARRULUS.
Fn. Suec. 2. n. 82.

Frequens licet reperiatur bella hæc avis in variis Europæ temperatioris partibus, nos non niſi fortuita advena inviſit, idque præcipue ſi hyems fuerit frigidior. Ingenio eſt vivido admodum alacrique, et ut taceam inuſitatam formæ elegantiam, nota ſibi fere peculiari diſtinguitur, cui ſimile vix in alia ave Europæa poſſit

obſervari, remigum nempe ſecundariorum appendicibus, quæ corneæ, planæ, oblongæ, lucidæ, et ruberrimæ. Colores feminæ languidiores. Magnitudine alaudam communem paulo ſuperat Ampelis Garrulus, et fructibus bacciſque præcipue veſcitur.

A.

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THE BOHEMIAN CHATTERER.

Generic Character.

Bill ſtrait, a little convex above, and bending towards the point; near the end of the upper mandible a ſmall notch on each ſide.

Noſtrils hid in briſtles.

Middle Toe cloſely connected at the baſe to the outmoſt.

Pennant.

Specific Character, &c.

CRESTED CHATTERER, with the ſecondary wing-feathers tipped by horny red appendages.

THE BOHEMIAN CHATTERER.

Will. orn. p. 132. pl. 20.

THE SILK-TAIL.

Ray. Syn. p. 85. A.

THE WAXEN CHATTERER.

Br. Zool. No. 112. pl. 48.

This beautiful bird, though common in many of the temperate parts of Europe, is but an occaſional viſitant in our own country, into which it ſometimes migrates,

grates, particularly during a ſevere winter. It is of a moſt lively and active diſpoſition, and is diſtinguiſhed, excluſive of the general elegance of its form, by a particularity ſcarce to be obſerved in any other European bird, viz. the extraordinary formation of the ſhorter or ſecondary wing-feathers, which are tipped by oblong, flat, horny appendages of a lucid ſurface and of a bright vermilion-colour. The colours of the female are leſs brilliant than thoſe of the male. Its ſize is ſomewhat larger than that of a lark. This ſpecies feeds principally on fruits and berries.

LIMAX ATER.

Character Genericus.

Corpus oblongum, repens; ſupra clypeo carnoſo; ſubtus Diſco longitudinali plano.

Foramen laterale dextrum pro genitalibus et excrementis.

Tentacula quatuor, ſupra os.

Lin. Syſt. Nat. p. 1081.

Character Specificus, &c.

LIMAX ATERRIMUS ſubtus pallidus.

LIMAX ATER.

Liſt. Angl. 131.

LIMAX tota nigra.

Aldr. inſ. 702.

COCHLEA NUDA 3 tota nigra.

Geſn. aquat. 254.

LIMAX ATER.

Lin. Syſt. Nat. p. 1081.

LIMAX MAXIMUS.

Character Specificus, &c.

LIMAX CINEREUS atro maculatus.

LIMAX MAXIMUS cinereus ſtriatus.

Liſt. anat. t. 3. f. 6—10.

LIMAX MAXIMUS.

Lin. Syſt. Nat. p. 1081.

LIMAX CINEREUS. *β.*

Gmel. Syſt. Nat. p. 3100.

Nudum

Nudum eſt genus Limax caretque teſta. De hoc differere ſupervacaneum fortaſſe nonnullis videatur, quippe quod vulgatiſſimum non poſſit ignorari. Digniſſimum tamen eſt genus quod ſpeciatim deſcribatur, cum exſtet exemplum generale ſeu archetypum unde omnes fere teſtarum univalvium incolæ formantur; quorum nonnulli adeo Limaci ſimiles, ut primo viſu in hoc tantum differre videantur quod ſe ad libitum intra teſtam poſſint ſubducere. Exemplo ſit genus *Helix* dictum, in quo nempe continentur Helices vulgares teſtaceæ. Quinimo reliquæ univalves (exceptis paucis quæ inſigniter diſcrepant) ad genus *Limax* plus minus appropinquant. Specierum Britannicarum notiores ſunt Limax ater, et Limax maximus: quorum prior aterrimo colore facillime diſtinguitur, in pratis et paſcuis ſæpiſſime repertus; alter rarior, fuſco-pallens, non ſine maculis ſtriiſque inæqualibus nigerrimis, in ſylvis præcipue conſpicitur, nec raro in hortis vere et autumno: in domos etiam irrepit. Convenit utriſque de victu, foliis ſcilicet et radicibus plantarum. Limax maculatus, (ut et alii nonnulli,) acaris minimis ſuper corpus turmatim diſcurrentibus, et in ipſum etiam foramen laterale thoracis irrepentibus ſæpiſſime ſolet infeſtari. Vetat tamen torpidum ingenium, aut mucus quo obducitur corpus, ut ſigna det moleſtiæ et perturbationis, vel exeuntibus acaris, vel intrantibus.

London, Published April 1st 1793 by F. P. Nodder & Co. N.os Bower Street.

THE

BLACK LIMAX.

Generic Character.

Body oblong; Thorax convex or ſhielded above, flat beneath; with a *Foramen* on the right ſide. Four *Tentacula*, ſituated above the mouth.

Specific Character, &c.

JET-BLACK LIMAX, pale beneath.
THE BLACK SLUG.
THE COMMON BLACK SNAIL.

THE

SPOTTED LIMAX.

Specific Character, &c.

GREYISH LIMAX, ſpotted with black.
THE GREAT SPOTTED SLUG.
THE SPOTTED WOOD-SNAIL.
THE SPOTTED HOUSE-SLUG, or CELLAR-SNAIL.

The genus Limax or Slug, conſiſts of the naked or ſhell-leſs Snails. As theſe animals are ſo very common, it might ſeem almoſt unneceſſary to introduce them into

into a work like the preſent. The genus however is in reality of very great importance, ſince it ſtands, as it were, the general archetype or pattern on which the animals of almoſt all the univalve ſhells are formed: indeed ſo very nearly are ſome of them allied to this genus, that they ſeem, on a curſory view, to differ in ſcarce any other circumſtance than that of being furniſhed with ſhells, into which they can at pleaſure withdraw themſelves. Of this the genus Helix, which contains the common or ſhell-ſnails, is a convincing proof. The reſt of the univalves, (with a few remarkable exceptions,) are more or leſs ſimilar to the genus Limax. Two of the moſt familiar ſpecies of Limax which this country produces are the Limax ater and maximus: the one is diſtinguiſhed by its intenſe blackneſs, and is extremely common in fields and meadows; the other, leſs common than the former, is of a pale brown, with irregular deep-black ſpots and ſtreaks: it is principally ſeen in woods and in garden-ground during the vernal and autumnal ſeaſons, and not unfrequently creeps into houſes. Both agree in their mode of living; feeding on the leaves and roots of vegetables. The ſpotted Slug, like ſome others of its genus, is often infeſted by a very ſmall ſpecies of acarus, which appears in great numbers, running with much celerity over the animal, and frequently entering the lateral foramen of the body. The Limax however, either from its natural hebetude, or from being coated at all times by a quantity of mucus, ſeems to feel no particular inconvenience from theſe little inſects, and ſhews no ſymptoms of irritation even when they are running in and out of the orifice in its ſide.

GRYLLUS CITRIFOLIUS.

Character Genericus.

Caput inflexum, maxillosum, palpis instructum.
Antennæ setaceæ s. filiformes.
Alæ quatuor, deflexæ, convolutæ: inferiores plicatæ.
Pedes postici saltatorii: *Ungues* ubique bini.
Lin. Syst. Nat. p. 692.

Character Specificus, &c.

GRYLLUS thorace tetragono angulis scabro.
Lin. Syst. Nat. p. 695.

LOCUSTA VIRIDIS.
Degeer. ins. 3. p. 437. n. 7. t. 37. f. 3.

LOCUSTA CITRIFOLIA. L: thorace tetragono angulis crenatis.
Fabr. Sp. ins. 2. p. 356.

Gryllorum omnium quotquot continet genus elytris quasi foliatis distinctos, maxima fortasse est hæc species, folioque simillima. Varias Indiæ Orientalis partes incolit.

London Published April 1st 1799 by J. & J. Vodden & Co. No. 8. Bower Street.

THE

CITRON-LEAVED LOCUST.

Generic Character.

Head inflected, armed with jaws, and furniſhed with palpi or feelers.

Antennæ either ſetaceous or filiform.

Wings four, deflex, convolute: the inferior ones plaited.

Feet hinder formed for leaping: *Claws* on all the feet double.

Specific Character.

LOCUST with the thorax of a ſomewhat quadrangular form and crenated on the edges, with very large green leaf-like exterior wings.

Of all that tribe of the genus Gryllus diſtinguiſhed by the leaf-like appearance of the elytra or exterior wings, this ſeems to be the largeſt ſpecies. It alſo yields to none in the perfect and ſtriking reſemblance to leaves which its wings exhibit. It is a native of various parts of India.

PARUS CÆRULEUS.

Character Genericus.

Roſtrum integerrimum, baſi ſetis tectum.
Lingua truncata, ſetis terminata.

Lin. Syſt. Nat. p. 340.

Character Specificus, &c.

PARUS vireſcens, ſubtus luteus, remigibus cæruleſcentibus, fronte alba, vertice cæruleo.

PARUS remigibus cæruleſcentibus: primoribus margine exteriore albis, fronte alba, vertice cæruleo.

Lin. Syſt. Nat. p. 341.

PARUS CÆRULEUS.

Geſn. av. 641.
Will. orn. 175.
Raj. av. 74.

Licet inter pulcherrimas avium Britannicarum merito numerari poſſit Parus cæruleus, detrahit tamen a pretio quotidianus conſpectus. Fatendum etiam eſt ineſſe illi indolem minus aptam ad conciliandum favorem; non tantum enim gemmas arborum frugiferarum devaſtat,

ſed et audax eſt ultra molem. Univerſo ſane generi ingenium eſt minime mite et amabile; ferunter enim aliis avibus vim inferre et occidere cerebrum evellendo, quod ſolent comedere. Hoc licet frequenter fieri vix auſim dicere, a ſedulis tamen hiſtoriæ naturalis indagatoribus affirmatur. Paris omnibus mira eſt in nidificando ſolertia, foecunditaſque ultra fidem. Iſte de quo jam loquimur nidum ſtruit elegantem in cavis arborum, vel ſub murorum ſummitatibus, interdum etiam in tuguriis et ſtabulis. Ova duodecim, quindecim, et etiam octodecim deponit; parturit tamen, ut plurimum, non niſi ſemel in anno.

THE

BLUE TITMOUSE.

Generic Character.

Bill ſtrait, a little compreſſed, ſtrong, hard, and ſharp-pointed.

Noſtrils round, and covered with reflex briſtles.

Tongue as if cut off at the end, and terminated by three or four briſtles.

Toes divided to their origin; back toe large and ſtrong.

Specific Character, &c.

GREENISH-BACKED TITMOUSE, yellow beneath, with bluiſh remiges, white forehead, and azure crown.

THE BLUE TITMOUSE.

Will. orn. p. 242. pl. 43.
Br. Zool. 1. No. 163. pl. 57. fig. 2.

LA MESANGE BLEUE.

Pl. enl. 3. fig. 2.

Amongſt the moſt beautiful of the Britiſh birds may be numbered the Parus cæruleus or common blue Titmouſe, which, from its frequent appearance, is leſs regarded

garded than ſo elegant a viſitant would otherwiſe be. It has however ſome qualities which are not calculated to obtain it univerſal approbation; ſince it is not only deſtructive to the young buds of fruit-trees, but has alſo a certain audacity in its diſpoſition which would hardly be expected from ſo ſmall a bird: indeed the manners of the Pari in general are obſerved to be not the moſt amiable, and they are accuſed of ſometimes attacking other birds, and killing them by picking out their brains. Whether this can be conſidered as a frequent occurrence I cannot take upon me to determine, but it is recorded by ſome of the moſt accurate obſervers of Nature. The birds of this genus eminently excel in nidification, and are prolific almoſt beyond belief. The preſent ſpecies builds its curious neſt in holes of trees; under the eaves of walls, and ſometimes in out-houſes. It lays about twelve, fifteen, and even ſometimes eighteen eggs, but ſeldom breeds more than once in a year.

PENNATULA RENIFORMIS.

Character Genericus.

Corpus in aliis pinnatum, in aliis integrum.
Stipes nudus officulo interno.

Character Specificus, &c.

PENNATULA RENIFORMIS, altero latere polypifera, ſtipite lumbriciformi.
Pall. el. zooph. p. 374. n. 222.

PENNATULA RENIFORMIS, ſtirpe lumbrici facie, altero latere polypifera.
Soland. et Ellis zooph. p. 65. n. 8.

ALCYONIUM AGARICUM.
Gmel. Syſt. Nat. p. 3811.

Formoſiſſimæ huic Pennatulæ diverſa eſt facies a pleriſque congeneribus. E ſtipite qui brevis vermique ſimilis, exoritur corpus expanſum, reniforme, ſupra foraminibus tubulatum, unde ad libitum extenduntur tentacula, ſeu membra hydras referentia. Color in parte ſuperiori viget lætiſſime purpureus; in inferiori pallidior eſt, et interdum fere flaveſcens. In inſulis Americæ variis innaſcitur pennatula reniformis, nec raro circa littora conſpicitur.

1st May 1815 J. Nodder & Co. New Bond Street.

THE

KIDNEY-SHAPED PENNATULA.

Generic Character.

Body in ſome ſpecies pinnated, in ſome entire; with polypes proceeding from its upper ſurface, and having a naked ſtem, furniſhed with an internal bone.

Specific Character, &c.

KIDNEY-SHAPED PENNATULA with worm-like ſtem.

THE KIDNEY-SHAPED PURPLE SEA-PEN.

Phil. Tranſ. vol. 53. t. 19. fig. 6—10.
Soland. and Ellis zooph. p. 65.

This moſt beautiful Pennatula is to be ranked amongſt thoſe ſpecies which recede in point of habit from the major part of the genus. It conſiſts of an expanded, kidney-ſhaped, flattened body, riſing from a ſhort worm-like ſtem, and covered on the upper ſurface with numerous tubular orifices, through which are exſerted at pleaſure the tentacula or polype-formed limbs

limbs of the animal. The colour of the upper ſurface is a beautiful purple; of the lower leſs brilliant, and ſometimes yellowiſh. It is a native of the Weſt-Indian Iſlands, where it is not uncommon.

ZEUS IMPERIALIS.

Character Genericus.

Caput compreſſum, declive: *Labium ſuperius* membrana tranſverſa fornicatum. *Lingua* ſubulata.

Membrana branchioſtega radiis ſeptem perpendicularibus: infimo tranſverſo.

Corpus compreſſum.

Lin. Syſt. Nat. p. 454.

Character Specificus, &c.

ZEUS cauda ſublunari, corpore nunc rubente, nunc viridi, nunc purpureo, albo-guttato.

ZEUS LUNA?

Gmel. Syſt. Nat. p. 1225.

POISSON DE LUNE?

Du Hamel des pêches, 3. p. 74. t. 15.

ZEUS cauda bifurca, colore argenteo purpureo ſplendens.

Strom. Sondmor. 323, 325. t. 1. f. 20.

Specierum omnium, quas paucas continet genus, maximam longe et ſplendidiſſimam depinximus, reliquos ſane piſces Europæos vividis coloribus vincentem; quibus nitet adeo cum recens capta ſit, ut inſignes ful-

gores imitando aſſequi incaſſum conetur ars pictoria. Variat præterea color primarius, qui vel ruber vel viridis aureo ſplendore quaſi vernice obducitur. Totum corpus, excepto ventre, maculis plurimis ovatis argenteo-albis guttatum eſt. Pinnæ, ut plurimum, coccineæ. Cauda latiſſima admodum lunata. Repertus eſt Zeus imperialis in Europæis multis littoribus, rarius in Britannicis. Creſcere ſolet in magnam molem, nec defuit ſpecimen quod tres pedes longitudine, pondere centum fere libras æquaret. Notandum vero eſt alios pleroſque piſces quos complectitur genus, modicos eſſe ſi non parvos, nitide argenteos, inſignes latis corporibus, forma tenui et compreſſa, radioſque nonnullos pinnarum quæ in dorſo caudaque, longius ultra reliquos excurrere.

London. Published June 1st 1798 by J. P. Neale & Co. Brown Street.

THE

OPAH,

OR

IMPERIAL ZEUS.

Generic Character.

Head compreſſed, ſloping down: *Upper lip* arched by a tranſverſe membrane. *Tongue* ſubulate.
Branchioſtegous membrane with ſeven perpendicular rays; the lower tranſverſe.
Body compreſſed.

Specific Character, &c.

ZEUS with ſomewhat lunated tail: the body generally either red, green, or purple, with oval white ſpots.

OPAH or KING-FISH.

Phil. Tranſ. abr. XI. p. 879. t. 5.
Brit. Zool. III. p. 195 t. 42. f. 2.

Of all the ſpecies of this genus, which is not a numerous one, the fiſh here delineated is by far the largeſt as well as the moſt ſplendid in its colour: it may indeed

indeed be conſidered as the moſt ſuperb of all the European fiſh, and when recently taken exhibits an appearance ſo ſingularly vivid as to ſurpaſs all the attempts of art to give an adequate idea of its beauty. It alſo varies in this reſpect; the predominating colour being either red or green, with a rich luſtre of gold, and appearing as if varniſhed. The whole body, except on the belly, is ſprinkled with numerous oval ſpots of a ſilvery white. The fins are commonly ſcarlet. The tail is very broad and ſtrongly lunated. This moſt elegant fiſh is ſometimes found on the Britiſh coaſt, but is more frequent on thoſe of other parts of Europe. It grows to a very large ſize, having been ſeen of the length of three feet, and of the weight of an hundred pounds. It may not be improper to obſerve that moſt of the other fiſhes of the genus, except the Doree, are ſmall ſpecies, remarkable for their ſhining ſilvery colour, the great breadth of their bodies, their thin or compreſſed form, and the length of ſome of the rays of their dorſal and caudal fins, which frequently run out far beyond the reſt.

VULTUR PERCNOPTERUS.

Character Genericus.

Roſtrum rectum, apice aduncum.
Caput impenne, antice nuda cute.
Lingua bifida.

Lin. Syſt. Nat. p. 121.

Character Specificus, &c.

VULTUR remigibus nigris margine exteriore (præter extimas) canis.

Lin. Syſt. Nat. p. 123.

VULTUR (percnopterus) capite nudo, gula plumoſa.

Haſſelq. it. 209.

FALCO MONTANUS ÆGYPTIACUS.

Haſſelq. act. ſtockh. 1751. p. 196.

VULTUR SACER ÆGYPTIUS.

Aldr. av. 1. p. 378. t. 379.

De avidiſſima horum alitum voracitate copioſius diſſerere longum eſſet et ſupervacaneum. Norunt omnes inexplebilem fere eſſe iis cupiditatem edendi. Non

tamen inopportunum ſit notare paucos præter Condoram ſeu vulturem maximum Americanum, animalia viva mortuis anteponere, ſed cadavera diligenter quærere quæ mira narium ſagacitate e longinquo ſentiunt. In orientalibus regionibus variæ vulturum ſpecies exercituum motus comitantur, juxtaque fatales campos gregatim circumvolant, dapem e ſtrage orituram avide expectantes. Longam tamen paſſæ eſuriem, præter ſolitum voraces quicquid cibi fors obtulerit ſubito et audacter arripiunt. Narrat Dominus Bruce peregrinator celeberrimus, dum iter Abiſſinum perageret, et in monte qui Lanalmon dicitur, cum ſociis jam jam pranſurus eſſet, vulturem immanem e proximis rupibus magna vi in patinam inſiliiſſe, et cum coxa armoque caprinis ſimul arreptis avolaſſe: mox reducem et plus prædæ meditantem ſcloppeto ab ipſo interfectum fuiſſe. Aquilam vocat hunc alitem Dominus Bruce, ſed a figura et deſcriptione ſatis patet vulturem fuiſſe, barbatum ſcilicet Linnæi, mole et gula jamdudum inſignem. Non poſſum non ſuſpicari Stymphalidas veterum majoribus vulturini generis ſpeciebus originem debere. Vultur Percnopterus non tantum in calidioribus regionibus invenitur, ſed et in Europa temperata. Figura hæc noſtra ab ipſa ave fideliter delineata eſt.

N°

London. Published June 1st 1793 by F.P. Nodder & Co. Nos 5 Bower Street.

THE

ALPINE VULTURE.

Generic Character.

Bill ſtrait, hooked at the tip.

Head commonly bare of feathers, with a naked ſkin in front.

Tongue bifid.

Specific Character, &c.

VULTURE with black remiges, hoary on the outer edge (except the exterior ones.)

The VULTURINE EAGLE of Aldrovand.
Will. orn. p. 64. t. 4.

Le VAUTOUR des Alpes.
Briſs. orn. 1. p. 464. t. 4.

Le PERCNOPTERE.
Buff. ois. 1. p. 149.
Pl. enl. 426.

The voracity and predacious diſpoſition of the birds of this tribe are too well known to require particular deſcription. It may be obſerved, however, that moſt of the ſpecies prefer the fleſh of dead animals to other

prey; few, except the Condor, or great South American vulture, attacking any living animals in preference, but diligently ſeeking for the remains of carrion, which they are enabled to perceive from a wonderful diſtance by their exquiſite power of ſcent. In the Eaſtern climates vultures of various ſpecies never fail to attend the field of battle, eagerly hovering in multitudes at ſome diſtance, in expectation of their wiſhed-for banquet. When preſſed by hunger, they become unuſually rapacious, and ſeize with indiſcriminating haſte whatever food is acceſſible. Thus we are aſſured by the celebrated Mr. Bruce, that during his Abyſſinian expedition, while himſelf and his companions were ſeated on the top of the mountain Lanalmon, preparing their repaſt, a large vulture came from the neighbouring cliffs, and ſeized out of the veſſel in which their meat lay, a leg and ſhoulder of goats fleſh in its talons, and flew away with them both; and ſoon returning for a ſecond booty, was ſhot by Mr. Bruce. From the deſcription and figure given by that gentleman, it appears probable, that though called an Eagle, it was a ſpecies of vulture; viz. the vultur barbatus of Linnæus, which is one of the largeſt of the genus, and is a bird of great ſtrength and vigour. It is no improbable ſuppoſition that the attacks of ſuch birds may have afforded ſome foundation for the ancient fictions of the Stymphalides. The vultur percnopterus is found not only in the hotter regions of the world, but even in the temperate parts of Europe. The figure here repreſented was taken with great accuracy from the bird itſelf.

LACERTA BASILISCUS.

Character Genericus.

Corpus tetrapodum caudatum, nudum.
Lin. Syſt. Nat. p. 359.

Character Specificus, &c.

LACERTA cauda tereti longa, pinna dorſali radiata, occipite criſtato.
Lin. Syſt. Nat. p. 366.
Laur. amph. p. 50. n. 75.
Seb. muſ. 1. t. 100. f. 1.

Baſiliſcus, quem memorant antiqui animalium venenoſiſſimum, vivit non niſi in bellis pictorum et poetarum fabulis. Omiſſis aliis, Lucanum ſatis ſit citare, qui licentia fiſus vere poetica deſcribit eum ardenti in Africa horrendum ſibilantem, et torvo lumine ipſum etiam ſerpentinum genus procul a ſeipſo deterrentem.

> " Sibilaque effundens cunctas terrentia peſtes,
> Ante venena nocens, late ſibi ſubmovet omne
> Vulgus, et in vacua regnat Baſiliſcus arena."

Baſiliſcus autem, quem eo nomine norunt nunc temporis phyſici, eſt lacertæ ſpecies forma admodum ſingulari,

lari, quæque eminenter diſtinguitur cute velut in alæ formam expanſa, per totum dorſum et maximam caudæ partem continuata, intuſque radiata, qualiter fere ſunt piſcium pinnæ, ſeu ut rectius loquar, alæ *draconis* ſive *lacertæ volantis*; quæque inæqualiter aſſurgit in variis partibus, adeo ut ſinuoſa et denticulata videatur, et ad arbitrium vel erigitur et dilatatur, aut deprimitur et contrahitur. Occiput intus cavum quaſi in cucullum ſeu potius in criſtam extenditur. Viſu licet terribilis ſit Baſiliſcus, ingenio tamen eſt prorſus innocuo. Aliarum plurimarum lacertarum more, inter arbores verſatur, inſectis aliiſque ejuſmodi victitans. Americam Auſtralem incolit. Jamdudum in Sebæ theſauro depictus eſt eleganter admodum et fideliter; effecit autem forma nova et incognita (rariſſima enim eſt ſpecies) ut a multis pro monſtro imaginario haberetur. Extat tamen in Muſeo Britannico ſpecimen perfectiſſimum, ſpiritu vini conditum, quod Sebanæ figuræ veritatem abunde comprobat. Probabile porro eſt, immo pene certum, Linnæum, qui, teſtante filio, ipſum animal nunquam viderat, ab hac Sebæ figura deſcriptionem ſuam ſpecificam condidiſſe. Color Baſiliſci pallet fuſco-cinereus, corpore ſuperiore notis ſeu umbris aliquot obſcurioribus variato. Longitudo ei eſt quaſi ſeſquipedalis. Notandum eſt, juniorem cutis iſtius quæ porrigitur ſuper dorſum caudamque nec non criſtæ quæ in occipitio aſſurgit, levia tantum veſtigia oſtendere.

London, Published June 1st 1793 by F.P. Nodder & C.N. 16 Bower Street.

THE

BASILISK.

Generic Character.

Body four-footed, tailed, naked.

Specific Character, &c.

LONG-TAILED LIZARD, with radiated dorſal and caudal fin, and pointed occipital creſt.

THE BASILISK.

The Baſiliſk of the ancients, ſuppoſed to be the moſt malignant of all poiſonous animals, and of which the very aſpect was ſaid to be fatal, is a fabulous exiſtence, to be found only in the repreſentations of painters and poets. Without citing other deſcriptions, it may be ſufficient to quote that of Lucan, who, with true poetic licence, repreſents the Baſiliſk exerting his terrific glance in the burning deſerts of Africa, and obliging the reſt of the poiſonous tribe to preſerve an humble diſtance.

> "Sibilaque effundens cunctas terrentia peſtes,
> Ante venena nocens, late ſibi ſubmovet omne
> Vulgus, et in vacua regnat Baſiliſcus arena."

But

But fiercely hiſſing, thro' the poiſon'd air
The Baſiliſk exerts his deathful glare:
At diſtance bids each vulgar peſt remain,
And reigns ſole monarch of his ſultry plain.

But the animal known in modern natural hiſtory by this name is a ſpecies of lizard, of a very ſingular ſhape, and which is particularly diſtinguiſhed by a long and broad wing-like proceſs or expanſion continued along the whole length of the back, and to a very conſiderable diſtance on the upper part of the tail, and furniſhed at certain diſtances with internal radii analogous to thoſe in the fins of fiſhes, or ſtill more ſo to thoſe in the wings of the draco volans or flying lizard. This proceſs is of different elevation in different parts, ſo as to appear ſtrongly ſinuated and indented, and is capable of being either dilated or contracted at the pleaſure of the animal. The occiput or hind part of the head is elevated into a very conſpicuous pointed hood or hollow creſt. Notwithſtanding its formidable appearance the Baſiliſk is a perfectly harmleſs animal, and like many other of the lizard tribe, reſides principally amongſt trees, where it feeds on inſects, &c. It is a native of South America. It has long ago been admirably figured by Seba, and as it is an extremely rare ſpecies, has ſometimes been conſidered, (from the ſtrangeneſs of its form) as a fictitious repreſentation. There is however in the Britiſh Muſeum a very fine ſpecimen, well preſerved in ſpirits, and which fully confirms the excellency of Seba's figure; from which, in all probability, Linnæus himſelf, (who never ſaw the animal,) took his ſpecific deſcription.

The

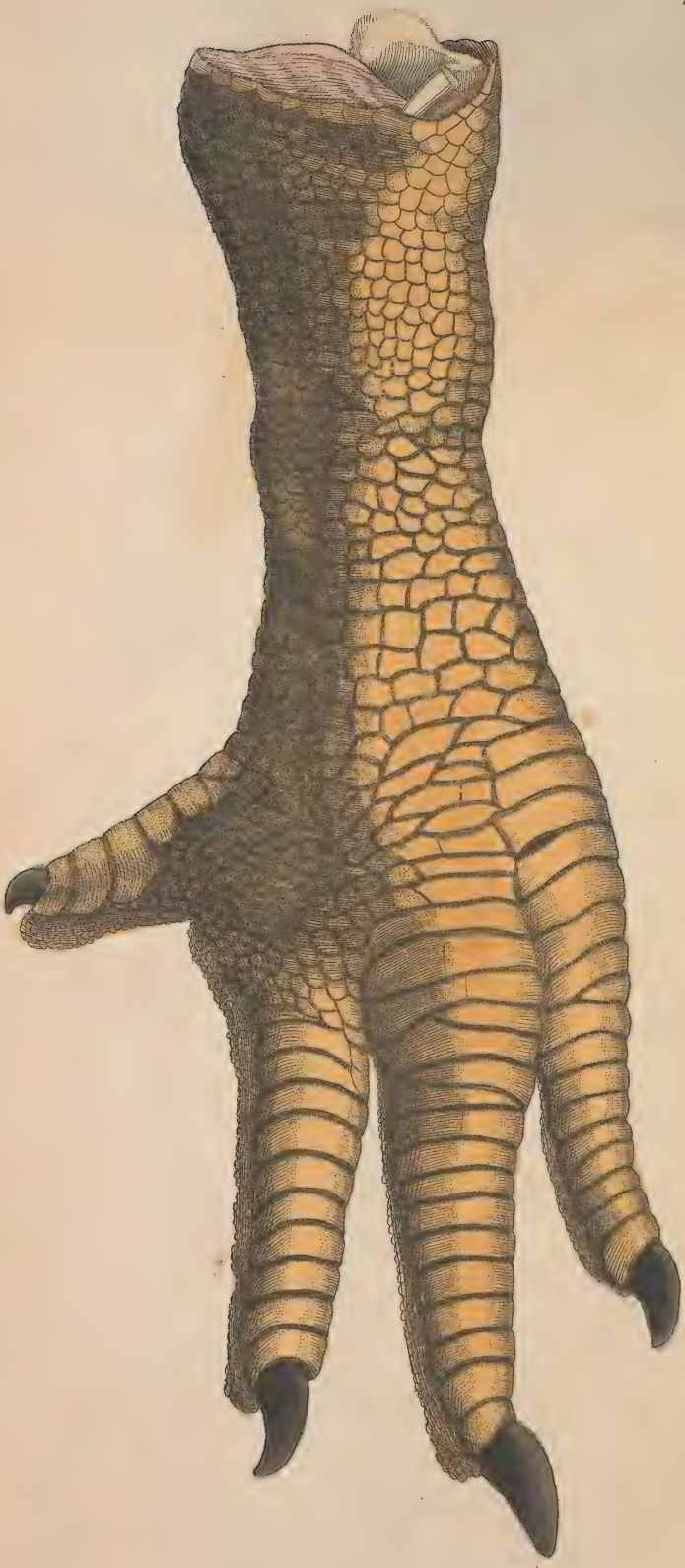
The colour of the Baſiliſk is a pale cinereous brown, with ſome darker variegations towards the upper part of the body. Its length is about a foot and half. The young or ſmall ſpecimens have but a ſlight appearance either of the dorſal or caudal proceſs, or of the pointed occipital creſt.

PES DIDI.

EX PEDE HERCULEM!

Didum ineptum Linnæi, miram ſcilicet et anomalam avem, in priore numero hujus operis fideliter ad exemplar archetypum depictam deſcripſi. At de vera avis exiſtentia a multis ſemper dubitatum eſt, eoque magis quod adhuc credi ſolitum eſt nulla ejus in muſeis Europæis reperiri poſſe veſtigia. Dum autem in miſcellaneam farraginem et quiſquilias Muſei Britannici nuperrime obiter inſpiciebam, comite ingenioſo pictore domino Reinagle juniore, fauſte admodum ſe oculis obtulit pes adeo inſolitus ut primo viſu Didi pedem nobis illico in mentem revocaverit. Examinato dehinc ulterius ſpecimine, verum eſſe et genuinum Didi pedem ſatis conſtabat. Dubium autem omne ſuſtulit Grewii deſcriptio in opere quod dicitur "Muſeum Regalis "Societatis," cui eum plene et ad amuſſim reſpondere ſenſi. Figuræ igitur, quæ juxta naturam depingitur, adjunxi etiam deſcriptionem quæ apud Grewium legitur, occaſionem avide arripiens rem rariſſimam diuque deſideratam lectoribus proponendi.

"Qui ibi aſſervatur pes ſquamis flavo rubeſcentibus "contegitur, et longitudine paululum ſuperat quan-"tuor uncias, latitudine quinque, ſaltem circa arti-"culos; et licet minor ſit pede ſtruthionis et caſuarii, "forſan tamen fere æquali ſit robore, ſi ratio habeatur "brevitatis."



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THE LEG OF A DODO.

In a preceding number of the preſent work I have given a deſcription, accompanied by a figure accurately copied from an original picture ſaid to have been taken from nature, of that moſt ſingular bird called the Dodo: an animal ſo very rare, and of an appearance ſo uncouth, as to have given riſe to ſome doubts as to its real exiſtence; which was alſo rendered ſtill more ſuſpicious from the ſuppoſed want of any remains of the bird itſelf in the muſeums of Europe. A very ſhort time ſince however, on curſorily examining ſeveral miſcellaneous articles in one of the apartments of the Britiſh Muſeum, in company with that very ingenious artiſt Mr. Reinagle jun^r, we had the good fortune to diſcover a leg, which even at firſt view appeared of ſo peculiar an aſpect that it inſtantly ſuggeſted the idea of the bird in queſtion. On farther examination it was ſtill leſs to be doubted that it muſt really have belonged to that curious bird; and on collating it with the deſcription given by Grew in his Muſeum Regalis Societatis, it agreed in all points with the meaſurements there particularized. I therefore accompany the figure, here given, which is repreſented of the natural ſize, with the deſcription from the above work of Grew, and it is with peculiar pleaſure that I embrace the opportunity of preſenting my readers with ſo intereſting a curioſity.

" The

" The leg here preſerved is covered with a reddiſh
" yellow ſcale. Not much above four inches long;
" yet above five in thickneſs, or round about the
" joints: wherein though it be inferior to that of an
" Oſtrich or Caſſoary, yet joined with its ſhortneſs,
" may render it of almoſt equal ſtrength."

TESTUDO MELEAGRIS.

Character Genericus.

Corpus tetrapodum, caudatum, testa obtectum.
Os mandibulis nudis, edentulis.

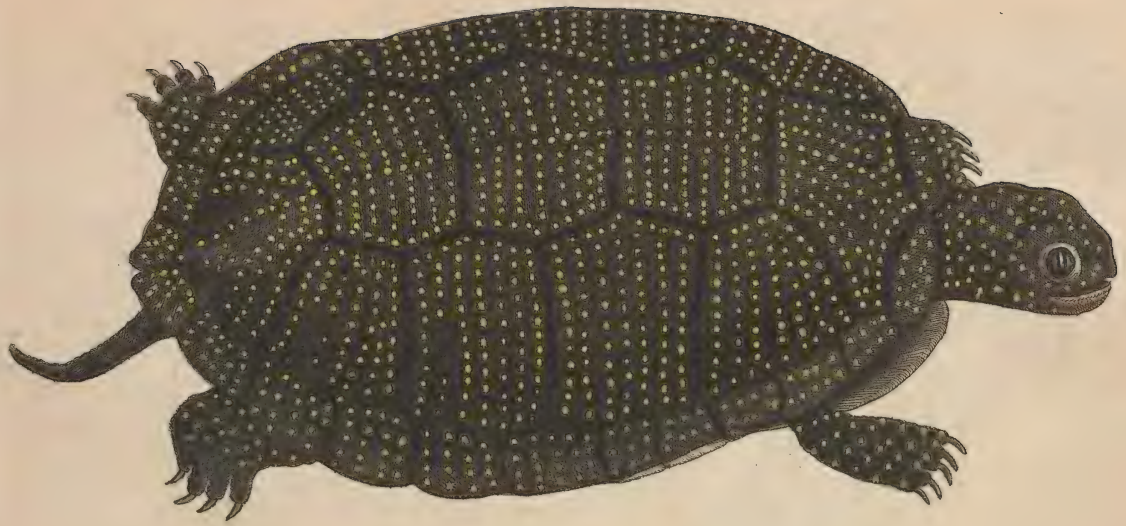
Lin. Syst. Nat. p. 350.

Character Specificus.

TESTUDO pedibus subpalmatis? testa ovata glabra maculis innumeris flavis guttata.

Plurimas testudinum species sibi invicem nimis affines accurate dignoscere difficillimum est. De aliis ne dubitari quidem possit, quippe quæ notas gerant conspicuas et insignes ad distinctionem: qualis scilicet est testudo geometrica, quam striarum flavarum super scutum bella et ordinata serie vel tiro statim agnoverit. Illam etiam quam describere pergimus a reliquo genere satis sejungit notabilis characterum et colorum dispositio. Longa est, ut plurimum, quinque vel sex uncias. Color fusco-castaneus saturatior per totum corpus superius guttulis ovatis albido-flavescentibus pulcherrime aspergitur, in singula tegminis divisione quasi ducenis. Scutum læve est, carens sulcis et prominentiis, nisi quod per medium trium præcipuarum divisionum excurrat carina paululum levata, quæ tamen in nonnullis speci-

minibus obſcurius cernitur. Lævis etiam eſt margo ſcuti, ſeu ex partibus conſtans una ſerie continuatis, non inæqualiter ſerratis, ſed figuram prope ellipticam toto ambitu efficientibus. Superficies inferior flaveſcit maculis aliquot fuſcis et inæqualibus notata. Caput modicum. Oculi magni. Pedes iis ſimiles quos habent reliquæ teſtudines terreſtres et fluviatiles, unguibus muniuntur validis. Cauda longula et ſquamoſa. Si ſuper fundum nigriorem confluxerint inter ſe maculæ, quod rarius evenit, perit magna ex parte pulchritudo teſtudinis meleagridis. In America præcipue innaſcitur.



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THE

SPECKLED TORTOISE.

Generic Character.

Body four-footed, tailed, covered with a ſhell.
Mouth conſiſting of naked toothleſs mandibles.

Specific Character, &c.

TORTOISE with ſubpalmated? feet, and ovate ſmooth ſhell ſpeckled with innumerable yellow dots.

LA JAUNE.

Cepede Hiſt. Nat. des quadr. ovip. 1. p. 135. t. 6.

So great is the ſimilarity between ſeveral of the tortoiſe tribe, that it is by no means eaſy to diſtinguiſh with accuracy the particular ſpecies. Some however are ſo ſtrongly characterized as to be at all times readily aſcertained. Thus the Teſtudo geometrica or ſtriped Tortoiſe is ſo ſtrikingly diſtinguiſhed by the beautiful and regular diſpoſition of the yellow marks on its ſhield, as to be inſtantly recogniſed by any one in the leaſt converſant with this genus. The ſpecies here repreſented is alſo, in general, ſo remarkable in its appearance as

to be immediately known from any other kind. Its uſual length is about five or ſix inches: its colour a deep cheſnut-brown, moſt elegantly marked over the whole upper ſurface with innumerable oval ſpecks of yellowiſh white. There are ſcarce leſs than 150 or 200 of theſe ſpecks on each diviſion of the ſhield. The whole is ſmooth, or undiſtinguiſhed by any furrows or riſings on the diviſions, except that down the middle of the three chief or central pieces runs an elevated or projecting carina as it were, which is much leſs diſtinct in ſome ſpecimens than in others. The edge or outline of the ſhell is ſmooth, or compoſed of pieces which do not project unequally, but form one continued, nearly eliptic figure. The lower ſurface is pale yellowiſh, with a few irregular patches of brown. The head is moderately large. The eyes large. The feet of the uſual ſtructure in other land and freſh-water tortoiſes, and furniſhed with ſtrong claws. The tail longiſh and ſcaly. It ſometimes happens that the beautiful appearance which generally diſtinguiſhes this ſpecies, is nearly loſt, or at leaſt greatly obliterated, by the dark ground-colour predominating too much, and the ſpots becoming confluent. This however is not often the caſe. It is a native of America.

DORIS ARGO.

Character Genericus.

Corpus repens, oblongum, ſubtus planum.
Os antice ſubtus.
Anus poſtice, ſupra cinctus ciliis.
Tentacula duo, ſupra corpus antice, intra foramina retractilia.

Character Specificus, &c.

DORIS OVALIS, corpore lævi, tentaculis duobus ad os, ano ciliato phrygio.
Lin. Syſt. Nat. p. 1083.

ARGO.
Bohadſch. mar. 65. t. 5. f. 45.

LEPUS MARINUS alter major.
Column. ecphr. t. 32.

Plurima quæ hoc genus amplectitur animalia limacibus valde affinia omnino in mari degunt. Oſtendit tabula ſpecierum Europæarum maximam et formoſiſſimam. Color variat: interdum ſcilicet flavus eſt, plus minuſve ſaturatus; interdum aurantius, ſeu etiam coccineus. In multis Britanniæ littoribus non raro conſpicitur Doris Argo.

THE LEMON DORIS.

Generic Character.

Body repent, oblong, flat beneath.
Mouth placed below, toward the anterior end.
Vent behind, ſurrounded above by a fringe.
Tentacula two, ſeated on the upper part of the body in front, retractile.

Specific Character, &c.

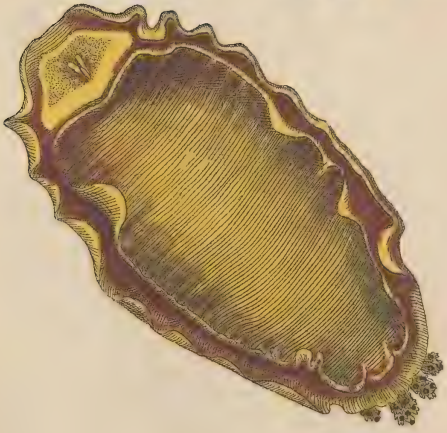
OVAL DORIS with ſmooth body; the vent ſurrounded by a ramified fringe.

LEMON DORIS.

Pennant Brit. Zool. 4. p. 36.

THE SEA-LEMON.

The animals of this genus are greatly allied to thoſe of the genus Limax, but are entirely marine. The ſpecies of Doris are numerous. The largeſt as well as the moſt elegant of the European kinds is that figured on the annexed plate. In colour it varies much; being ſometimes of a yellow, more or leſs deep, and ſometimes of a bright orange, or even ſcarlet. It is not unfrequently found on ſeveral parts of the coaſts of Britain.



SPONGIA INFUNDIBULUM.

Character Genericus.

Animal? fixum, flexile, polymorphum, torpidiſſimum, contextum vel e fibris reticulatis, vel e ſpinulis gelatina viva veſtitis;

Oſculis ſeu foraminibus ſuperficiei aquam reſpirantibus.

Soland. et Ellis zooph. p. 182.

Character Specificus, &c.

SPONGIA infundibuliformis turbinata flexilis.

Lin. Syſt. Nat. p. 1296.

SPONGIA forma infundibuli.

C. Bauh. pin. p. 369.

J. Bauh. hiſt. pl. 3. p. 816.

SPONGIA foliata aſpera et Spongia infundibuliformis.

Petiv. peregr. t. 9. f. 4. 6.

SPONGIA (crateriformis) infundibuliformis molliuſcula, membranaceo-celluloſa, extus villoſa craſſior.

Pall. el. zooph. p. 386. n. 233.

De ſpongiarum natura, mira certe et ambigua, diu patuit philoſophis amplus diſputandi campus. Crediderunt

derunt nonnulli ſatis inepte, quæque opinio nunc penitus abolevit, eſſe eas vermium quorundam opus qui in cavitatibus pererrantes reperiuntur. Alii mera eſſe vegetabilia putarunt. Ineſſe autem iis vim vitæ ex hoc ſatis conſtat, quod in aquis natalibus attrectatæ a tactu paululum refugiant, quodque quieſcentes poros alternatim contrahant et dilatent. Ut verbo dicam, conſtant ſpongiæ e ramoſiſſima tuborum capillaceorum copia, facultatem quandam contractationis habentium: horum ope nutrimentum ex aquis in quibus creſcunt abſorbentes. Iis igitur utpote *zoophytorum* omnium inertiſſimis ſeponendus eſt locus proprius et ab aliis ſeparatus. Facie inter ſe plurimum differunt. Aliæ ſcilicet *amorphæ*, ſeu figura carentes certa et conſtanti, ut ſpongia *officinalis* vel vulgaris. Aliæ cyathi inſtar formatæ. Aliæ tubulatæ; aliæ multiformes; aliæ denique ramoſæ et etiam reticulatæ ad ſimilitudinem quodammodo accedunt Gorgoniæ, ſeu Flabelli Veneris. Species, quam pro exemplo depinximus, maris Mediterranei et Indici rupibus, more reliqui generis, adhæret. Magnitudine variat. Habet nempe interdum diametros pedem, ad minimum, interdum paucas tantum uncias. Color ejus leviter fuſcus, et ſubſtantia minus tenax quam ſpongiæ vulgaris, quæ et *officinalis* dicitur.

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FUNNEL SPONGE.

GENERIC CHARACTER.

Animal? fixed, flexible, torpid, of various forms; compoſed either of reticulated fibres, or maſſes of ſmall ſpines interwoven together; clothed with a living? gelatinous fleſh full of ſmall mouths or foramina on its ſurface, by which it ſucks in and throws out the water.

SPECIFIC CHARACTER, &c.

FUNNEL-SHAPED FLEXILE SPONGE with ſurface more or leſs irregular or roughened.

CUP SPONGE.

FUNNEL SPONGE.

Sponges have afforded a field of controverſy for philoſophical obſervers, and may be numbered amongſt the moſt obſcure or doubtful productions of nature. By ſome they have been ſuppoſed the fabric of certain worms allied to Terebellæ, which are often found ſtraying about in their cavities: an idea not very probable, and which is now ſufficiently exploded. Others

have imagined them to be mere vegetables; but that they are really poſſeſſed of a living principle is evident from the circumſtance of their alternately contracting and dilating their pores, and ſhrinking in ſome degree from the touch when examined in their native waters. In ſhort, ſponges conſiſt of an infinitely ramified maſs of capillary tubes, poſſeſſed of a certain degree of contractile power, and capable from their ſtructure, of abſorbing nutriment from the ſurrounding fluid in which they are by nature immerſed. They therefore form an animal tribe different from all others, and may be conſidered as the moſt torpid of all Zoophytes. The different ſpecies of Sponge differ greatly in appearance from each other: ſome being amorphous, or of no regular ſhape, as the common or officinal ſponge: others cyathiform or cup-ſhaped: others tubular, and of various forms; and ſome are ramified and reticulated in ſuch a manner as to bear a conſiderable reſemblance to the ſea-fan or Gorgonia Flabellum of Linnæus. The ſpecies here exhibited, as an example of the genus, is found both in the Mediterranean and Indian ſeas; adhering, like others of its genus, to rocks. In ſize it varies from a few inches in diameter to that of a foot or more. Its colour is a pale brown, and its ſubſtance leſs ſtrong or tenacious than that of the common or officinal ſpecies.

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